



**A STRATEGY TO OPTIMISE THE CONTRIBUTION OF WORK INTEGRATED  
LEARNING TOWARDS THE EMPLOYABILITY OF STUDENTS OF THE CENTRAL  
UNIVERSITY OF TECHNOLOGY, FREE STATE.**

**by**

**HENDRIK SEBASTIAAN JACOBS**

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**Department of Business Support Studies**

**Faculty of Management Sciences**

**at the**

**Central University of Technology, Free State**

**Supervisor: Professor AJ Strydom (PhD Economics)**

## DECLARATION OF INDEPENDENT WORK

### DECLARATION WITH REGARD TO INDEPENDENT WORK

I, HENDRIK SEBASTIAAN JACOBS, identity number \_\_\_\_\_ and student number \_\_\_\_\_, do hereby declare that this research project submitted to the Central University of Technology, Free State for the Degree DOCTOR TECHNOLOGIAE BUSINESS ADMINISTRATION, is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the Central University of Technology, Free State; and has not been submitted to any institution by myself or any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.



2015/11/06

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## ABSTRACT

The enhancement of the employability of students is an important aspect of Work-Integrated Learning (WIL). WIL is defined as a tripartite curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace. Employability is described as a mixture of elements that may differ between jobs, but is in the end about those elements that make a person a useful, and therefore, desirable employee.

The study represents an investigation into the formulation of a strategy to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State (CUT). The investigation was based on a mixed-method approach, which enabled the researcher to use both quantitative and qualitative methods to address the research problem. The sample size for the quantitative study is 118, constituting the active employers for WIL on the WIL database of CUT during the 2011–2014 periods. The sample size for the qualitative study is 30, determined as one student, who has completed WIL, and one lecturer responsible for the monitoring and assessment of WIL per department with programmes that contain a compulsory WIL component.

The results of the study indicate that a strategy was developed to optimise the contribution of WIL towards the employability of students of CUT on an institutional level with specific indicators on faculty and programme levels. In addition, it was empirically proven that WIL enhances the employability of students, as well as what the specific ingredient of WIL is that enhances employability. Profiles of the ideal graduate and WIL student were also developed based on the identification of a bucket of skills and qualities required by employers.



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## LIST OF ABBREVIATIONS

AC	Abstract Conceptualisation
AE	Active Experimentation
BEd	Baccalaureus Educationis
CCFOs	Critical Cross-Field Outcomes
CE	Concrete Experience
CECA	Cooperative Education & Career Action
Co-op	Cooperative Education
CTM	Committee for Tutorial Matters
CUT	The Central University of Technology, Free State
DV	Dependent Variable(s)
EL	Experiential Learning
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HEIs	Higher Education Institutions
IV	Independent Variable(s)
NDSU	North Dakota State University
OFFA	Office for Fair Access
PGCE	Postgraduate Certificate in Education
R&D	Research & Development
RO	Reflective Observation

SME	Small to Medium Enterprise
STEPS	Strategic Transformation of Educational Programmes and Structures
SWOT	Strengths, Weaknesses, Opportunities and Threats (analysis)
UC	University of Cincinnati
UK	United Kingdom
USA	United States of America
VM	Venture Matrix Scheme
WBL	Work-based Learning
WBLIC	Work Based Learning as Integrated Curriculum
WIL	Work Integrated Learning

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# CHAPTER 1

## BACKGROUND AND ORIENTATION

### 1.1 Introduction

A strategy can be described as a plan to achieve a major goal or solution (Businessdictionary.com 2013:1; Oxforddictionaries.com 2013:1). The implementation of innovative strategies is imperative for any organisation to stay at the forefront of innovation and ahead of competition. The aim is thus not to copy the ideas of rivals but according to *The Times 100* (2013:2), rather to differentiate oneself within the market or sector in which one operates.

Even the higher education sector is managed in a business sense in the modern era. Universities, for instance, are constantly looking for strategies to improve their financial position, competitive position and branding in order to build their reputation and attract better-quality students (Kennedy 2013:1). By way of an example, the Central University of Technology, Free State (CUT) was recently engaged in a process called the Strategic Transformation of Educational Programmes and Structures (STEPS). The purpose was to redefine learning programmes in accordance with the latest industry needs and trends in an attempt to improve the quality of learning programme offerings to students and to gain a competitive advantage over major competitors.

A result of the STEPS process was that all learning programmes would have a compulsory component of Work Integrated Learning (WIL) in future. The challenge was to develop a strategy around this principle, which will result in the best possible dividends for the university, students and final consumers (employers). The aim was, amongst others, to use WIL to create a competitive advantage for CUT. The best way to achieve this was to structure the compulsory WIL component in such a way that the employability of CUT students could be optimised through the comprehensive and effective application of WIL.

The enhancement of the employability of students is an important aspect of Work-Integrated Learning (WIL). Fleming, Martin, Hughes and Zinn (2009:189) agree with this statement by articulating,

The overall aims of cooperative education, practicum, or work integrated learning (WIL) experiences are to prepare students for the workplace by developing both generic and specific competencies that will enhance employability.

The University of Leicester (2009:12) came to the same conclusion and found that work-based learning elements in the curricula enhance students' employability and possibly augment academic learning. The question to be asked, though, is:

*Which aspects of WIL and competencies or skills developed through or benefits derived from WIL will optimally enhance the employability of students?*

Therefore, the purpose and contribution of the study is to formulate a strategy to optimise the contribution of Work Integrated Learning towards the employability of students of CUT.

## **1.2 Previous research**

Completed and current studies in the field of WIL address topics related to broad issues such as the management of WIL (Wessels 2007:8; Du Plooy 2007:5), WIL in the FET sector (Volschenk 2005:3; Bronhorst 2007:2) and mentorship in WIL (Keating 2008:3), which are all qualitative by nature. There are also two completed studies of which one investigated the WIL experiences of students in a specific programme by means of a qualitative approach (Steenkamp 2007:5) and the other followed a quantitative approach with regard to the influence of WIL on test results in a specific module (Potgieter 2003:2).

There was thus a gap to focus specifically on a strategy to optimise the contribution of Work Integrated Learning towards the employability of CUT students, which this study addressed.

## 1.3 Theoretical framework

### 1.3.1 Theoretical perspective: Strategy formulation

In reviewing business strategy, Nickols (2013:4) concluded that strategy is in general concerned with how particular objectives or goals are achieved. He indicates strategy in general, corporate strategy and competitive strategy as the three basic strategies for consideration. In narrowing the focus to the formulation of a strategy to optimise the employability of CUT students through WIL to create a competitive advantage, the focus was placed on what competitive strategy entails.

Nickols (2013:1) and Allison (2013:2) cite the work of Harvard Professor Michael Porter as the foremost opinion regarding competitive strategy. Their discussion of Porter's three types of competitive strategy is summarised as follows by Walters (2013:5) and Griffin (2013:2):

- The cost leadership strategy is employed when organisations compete for the largest number of customers through price when goods or services are standardised.
- The differentiation strategy is called for when a product or service is to be provided with distinctive qualities that are valued by customers to set one apart from the competition.
- A focus strategy is required when one aims to serve a limited group of customers better than one's competitors do who serve a broader range of customers.

More appropriate for this study was to explore the differentiation strategies as a means of enhancing the competitive position of CUT, by setting itself apart from competition in structuring the WIL component in such a way that the employability of CUT students is optimised. It was therefore imperative to examine what differentiation strategies entail.

Porter (1996:61) asserts that strategy is the creation of a unique and valuable position in the marketplace through, amongst others, differentiation strategy. Differentiation strategy is not only limited to the way in which firms make their products different from

those of competing firms, but is also a way to reduce competition according to Mosakowski (1993:823). Kim and Maubourgne (2005:106) have also introduced the term “blue ocean” as an analogy to describe the wider potential of market space that is vast, deep, and not yet explored, which implies going beyond competing in established industries as another way of applying differentiation strategy. A framework for competitive forces thus includes many variables and seeks to capture much of the complexity of actual competition (Porter 1991:98). What are then the intended benefits of differentiation?

Kelchner (2013:1) summarises the key advantages of product differentiation strategy as follows:

- Value creation is attained when the focus is on the cost value of a product versus similar products and creates a perceived value in terms of saving costs or durability in comparison with other products.
- It allows for non-price competition of which different taste and quality of candy as well as a focus on a specific car as a status symbol instead of cost saving are examples.
- Brand loyalty is achieved through perceived quality or cost savings that may create customer loyalty. This is also referred to as an intangible asset by Porter (1991:102), together with relationships and networks. It is something through which distinctiveness is created (Arora 2009:7).
- The perception that no perceived substitute is available can be created when the focus is on the quality or design differences that other products do not have.

It can thus be stated that product differentiation depends on physical product characteristics and other elements of the marketing mix. It is based on perceived and actual physical and nonphysical product differences and can therefore be defined as the degree of cross-price inelasticity with respect to other competing brands and is represented by a demand function that is relatively unaffected by changes in the prices of competing brands (Dickson & Ginter 1987:2).

### 1.3.2 Theoretical perspective: Work Integrated Learning

In establishing a theoretical framework around WIL it was necessary to start with an analysis of what the term WIL entails. This is especially significant, given that Zegwaard and Coll (2011:8, 11) have found that a diverse range of terms (cooperative education, work integrated learning, work-based learning, workplace learning, professional training, industry-engaged learning, internships, apprenticeships, experiential learning [EL], etc.) has developed and that Groenewald (in Coll & Eames 2004:19) argues that terminologies are used interchangeably. It therefore had to be established what is meant by WIL and how it can be defined.

Looking at the diverse range of terms, a starting point to determine what is meant by WIL was to identify common denominators in the various terminologies used. Downey, Kalbfleisch and Truman (2002:1) identified academic study alternated with work in industry together with the application of theoretical knowledge as common denominators in terminology by stating that “... work-integrated learning represented by cooperative education, where students alternate study terms with work terms in jobs that permit them to apply what they are learning ...” Martin and Hughes (2009:7-8) indicate that work-based learning

aims to integrate academic study and practical work experience ... [to] ... provide a bridge for the student between the academic present, and their professional future – an opportunity to apply and merge theoretical knowledge gained in academic studies to ‘real world’ work place practical experiences, [which involves] [a] three way partnership between the student, the work place organisation and the university.

Powell, Tindal and Millwood (2008:63-81) also emphasised the role of the three-way partnership, where WIL includes a combination of EL in industry with academic learning on campus. The emphasis on the practical work situation required a closer look at what is meant by EL in industry.

Kolb (1984:38) defines EL as “the process whereby knowledge is created through the transformation of experience” and is primarily based on the psychological and

philosophical work of John Dewey (1916), whose pragmatism can be interpreted as a form of action intended to engage the learner in both critical reflection and problem-solving to improve social conditions. Bender *et al.* (2006:17-19) have summarised Kolb's theory by indicating that his learning process is a four-stage cycle consisting of a concrete experience, followed by reflective observation, which leads to abstract conceptualisation and active experimentation built on the concepts generated.

From the above it could be concluded that the common denominators in the terminology used were the three-way partnership that involves two distinct settings of learning on campus and in the workplace, leading to the application and integration of classroom-based theory with learning in the workplace. WIL can therefore be described as "An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum", as stated by Patrick *et al.* (2008:vi). Having established a common understanding of WIL, the next step was to determine the benefits or skills derived from WIL in relation to the enhancement of employability.

The literature studied revealed various benefits or skills derived from WIL with regard to the enhancement of employability, namely:

- employability skills, communication skills, time management, reflective thinking, maturity, independence and self-confidence (Smith & Simbag n.d.:2; Cullen 2008:126-130; Fleming, Zinn & Ferkins 2008:157; Franz 2008:165);
- improving graduate capabilities and employability (Papadopoulos & Broadbent 2011:1; Kramer & Usher 2011:25; University of Canberra 2010:12; Ferns & Moore 2012:207);
- the development of higher-order thinking skills (Costley 2007:9);
- a broad range of personal, social and professional capabilities (Swirski & Simpson 2012:239);

- to build working relationships, strong analytical reasoning, and being able to work effectively in a team (Freudenberg, Brimbel & Cameron; in Drysdale & McBeath 2012:169); and
- practical skills (Agrawal 2013:15).

A common understanding of what the term WIL, as well as various benefits associated with it and employability entails has thus been established.

## **1.4 Conceptual framework**

Within the competitive environment of higher education and the resultant STEPS process embarked upon by CUT as indicated above, it could be deduced that the idea of being more to everyone has been abandoned. The emphasis has rather shifted to a more focused approach, with the aim to differentiate CUT through WIL as an example. This brought the relevance of implementation based on sound strategy to the fore. An investigation of business strategy in general and differentiation strategy in particular were thus required.

The integration of theory and practice through WIL has an underlying intention and is by implication an active process of student involvement by applying theoretical concepts in the practical work situation. This relates to the active process in which learners relate new information to previously acquired information. The four-stage cycle of EL theory accentuates active student involvement in the process of student learning and development.

In the introduction, it was stated that one of the aims of the study is to determine which aspects of WIL and competencies or skills developed through or benefits derived from WIL will optimally enhance the employability of students. This implied that a theoretical perspective of WIL and the contribution thereof towards enhancing the employability of students were required. It also brought the importance of participating employers to the fore as an extension of the learning environment to commerce, industry and the public sector, as well as the ultimate judges of the employability of students. The views of

employers, as well as students and the university as partners in the three-way partnership were therefore critical in determining the following:

- the benefits or skills developed through WIL related to employability; and
- a strategy to be developed for WIL towards optimising the employability of students.

The study was therefore guided by the development of a strategy that can optimise the contribution of WIL towards the employability of students. To optimise the contribution of WIL towards the employability of students required the following:

- Determine the current status: it is known that WIL enhances employability
- Determine the goal to be achieved: Optimise the contribution of WIL towards employability
- Determine how to get there through a SWOT analysis and by setting objectives (the what) and strategy (the how) to achieve the goal (Queensland Government 2011:2; University of California 2007:1; Harris 2010:2)

## **1.5 Problem statement**

### **1.5.1 Problem background**

The literature studied and reported above revealed a gap. Although the same benefits or set of skills was reported in some cases, for example, Smith and Simbag (n.d.:2), Cullen (2008:126-130), Fleming *et al.* (2008:157) and Franz (2008:165) have all found that communication, time management, reflective thinking, maturity, independence and self-confidence contribute to employability, not everyone reported the same set of skills developed through WIL. Different skills or skill sets were reported, for example, Agrawal (2013:15) reported the development of practical skills, whereas Costley (2007:9) indicated the development of higher-order thinking skills, and Swirski and Simpson (2012:239) have found a broad range of personal, social and professional capabilities developed through WIL.



The questions therefore were:

*What specifically about WIL enhances the employability of students and how can this be optimised in a strategy?*

A reason could be, according to Yorke (in Smith *et al.* 2009:23), that

Work-integrated learning is not simply a process of students engaging in work experience with the hope that it will result in employability.

This still left the following question to be answered:

*How can the contribution of WIL towards the employability of students be optimised through the inclusion of all relevant variables in one comprehensive strategy?*

### **1.5.2 The problem**

The problem is that it is not clear how the contribution of WIL towards the employability of students can be optimised in one comprehensive strategy.

## **1.6 Research questions**

### **1.6.1 Main research question**

How can the contribution of WIL towards the employability of students be optimised in one comprehensive strategy?

### **1.6.2 Specific research questions**

- What does the literature reveal regarding the potential contribution of WIL towards employability?
- What does the literature reveal regarding strategies that can be adopted to enhance the competitive position of an organisation?

- What does the literature reveal about the application of WIL in higher education from an international perspective?
- What are the views of employers regarding the contribution of WIL towards enhancing the employability of students?
- What strategy can be developed based on the inputs of employers, students and the university to optimise the employability of students based on the results of the study? This will be done by:
  - determining the current status (it is known that WIL enhances employability);
  - determining the goal to be achieved (optimise the contribution of WIL towards employability); and
  - determining how to get there through a SWOT analysis and by setting objectives (the what) and strategy (the how) to achieve the goal.

## **1.7 Objectives**

### **1.7.1 Main objective**

To formulate a strategy to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State.

### **1.7.2 Subsidiary objectives**

In an attempt to formulate a strategy for WIL the following objectives are set:

- To provide a theoretical perspective on WIL and its potential contribution towards employability
- To provide a theoretical and practical perspective on innovative business strategies that can enhance the competitive position of an organisation.
- To provide a theoretical review of the application of WIL in higher education from an international perspective

- To determine the benefits or skills developed through WIL related to employability quantitatively
- To conduct a qualitative survey to determine stakeholders' views regarding a strategy to be developed for WIL towards optimising the employability of students
- To develop a strategy that includes all relevant variables to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State

## **1.8 Methodology**

### **1.8.1 Research philosophy**

The study necessitated a mixed-method approach, which implies employing both a positivist and post-positivistic approach. A positivist paradigm provides for a systematic and scientific approach to research where the emphasis is on measurement (whether this be of scientific quantities, e.g. time or speed through experimental activities), or of attitudes, behaviours and opinions through surveys and questionnaires (University of the West of England 2013:1). This approach also assists with generalisation and quantifiable observations to evaluate results with the aid of statistical methods (Williams 2011:1). A post-positivistic approach, according to Golafshani (2003:597), seeks to understand phenomena in context-specific settings. It not only relies on statistics or numbers, but is aimed at gaining insight into people's attitudes, behaviours, concerns and motivations as well (Ereaut 2007:2). It is concerned with collecting in-depth information and should thus be undertaken to achieve a deep understanding of the issues when one needs to trade detail for generalisability and to generate new theories or hypotheses (Trochim 2006:1-4; DJS Research Ltd. 2009:1).

### **1.8.2 Research design**

Hara (1995:7) describes quantitative research as an endless pursuit of facts, while Golafshani (2003:597) emphasises the measurement and analysis of causal relationships between variables. It is relevant to this research, since findings are

presented in numerical format and questions require a choice between definite answers (Cohen, Manion & Morrison 2007:5-26). In qualitative research, the emphasis is on “understanding through looking closely at people’s words, actions and records”, as described by Maykut and Morehouse (1994:92). The aim is to create descriptive analyses that emphasise a deep and interpretive understanding of the subject under investigation (Henning, Van Rensburg & Smit 2004:21).

A quantitative study is about determining the relationship between variables, i.e. independent (IV) and dependent variables (DV). In this case, the independent variable is WIL and the dependent variable the employability of students. In an experiment, the IV is the variable that is varied or manipulated and the DV is the response that is measured; therefore, the IV is the presumed cause and the DV the presumed effect (Williams, 2006:1). Kerlinger (1986:32) also states that

In non-experimental research, where there is no experimental manipulation, the IV is the variable that 'logically' has some effect on a DV. For example, in the research on cigarette-smoking and lung cancer, cigarette-smoking, which has already been done by many subjects, is the independent variable.

Quantitative research is also classified as either descriptive or experimental. A descriptive study establishes associations between variables, whereas an experimental design establishes causality (Hopkins 2000:1). Descriptive studies thus measure subjects once as they are, whereas in experimental studies, subjects are measured before and after treatment, which makes a descriptive study applicable to this research.

The aim of this research corresponds to what Morrison (in Cohen *et al.* 2007:206) states as useful with regard to surveys, namely “it gathers data on a one-shot basis; ascertains correlations and provides descriptive, inferential and explanatory information”. In developing a strategy to optimise the contribution of WIL towards the employability of students, it will be necessary to gather data at a particular point in time to determine what kind of a relationship exists between WIL and the employability of students as described by Cohen *et al.* (2007:205).

A survey was selected as the most appropriate method, since causality as proposed in quasi-experiments was not the issue, but rather a descriptive study that produces associations. No pre-test was done either. A survey, instead of *ex post facto* research was preferred, mainly because of the ascertainment of associations and provision of descriptive and explanatory information that it provides, which was required for this study.

As a survey was selected as the method to be used and a questionnaire is regarded as an appropriate strategy. A questionnaire (Kerlinger; in Cohen *et al.* 2007:317) is a

widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher and often being comparatively straightforward to analyse.

It was required to obtain the rating, views and opinions of employers regarding the role of WIL in enhancing the employability of students. A questionnaire with closed questions was therefore selected for the quantitative study, because it is widely used and thus enhances credibility together with validity and reliability; it can be administered without the presence of the researcher to enhance objectivity, and is comparatively straightforward to analyse (Keagan n.d.:2). A questionnaire with open-ended questions was used for the qualitative investigation, because it provides rich and personal data, possible answers are unknown and, according to Cohen *et al.* (2007:206, 321), it is exploratory; thus appropriate to solicit stakeholders' views.

### **1.8.3 Population**

In terms of the quantitative study, the target population comprised all the employers used for WIL by the Central University of Technology, Free State. The target group was the active employers for WIL on the database during the 2011–2014 periods, namely 694 employers.

For the qualitative study, the target population was all students and lecturers in those programmes offered at CUT that contain a compulsory WIL component. The target

group was the students who have completed WIL, as well as the lecturers responsible for the monitoring and assessment of students placed for WIL.

#### **1.8.4 Sampling**

The sample size was determined as a percentage of the active employers for WIL on the WIL database during the 2011–2014 periods. As a representative sample was required that enables generalisation, an appropriate sampling method (Stoker 1981:4) had to be selected. According to Stoker (1981:7), the size of the sample should be determined in proportion to  $\sqrt{\frac{N}{20}} \times 20$ . In accordance with this formula, the sample was 118 employers, as determined from the target group of 694 (N). The sample was further divided into sub-categories per qualification on a proportionate basis. This implies, for example that, should the employers of the Tourism Management qualification constitute 15% of the target population, these employers should also be 15% of the sample determined. The identification of specific employers to include in the sample was done on a scientific basis with the aid of statistical tables.

The sample size for the qualitative study was 30, determined as one student, who has completed WIL, and one lecturer responsible for the monitoring and assessment of WIL per department with programmes that contain a compulsory WIL component.

#### **1.8.5 Data collection**

For the quantitative study data were collected by means of a questionnaire with close-ended questions. Closed questions have a list of possible answers from which respondents must choose and include yes/no questions, true/false questions, multiple-choice, or scaled questions that are easy to code and interpret and enhances credibility based on it being widely used (Explorable 2015:2). In this case, Likert-scale questions were also used, which is a “one-dimensional scaling method”, according to Trochim (2006:2). It is used for measuring by “asking people to respond to a series of statements about a topic” and “assumes that the strength/intensity of experience is linear, i.e. on a continuum from strongly agree to strongly disagree”, as described by McLeod (2008:1).

An internet-based survey in combination with face-to-face interviews was used to collect data for the qualitative study by means of a questionnaire with open-ended questions as it enabled the researcher to establish rapport with potential participants and gain their cooperation in this manner. By the nature thereof, these interviews yield the highest response rates in survey research. An opportunity was also presented to the researcher to clarify ambiguous answers and, when appropriate, seek follow-up information. In addition, telephonic interviews were used where appropriate, as these interviews are less time consuming and less expensive (University of Wisconsin 2012:1). Field workers were used to assist with data collection.

A questionnaire with close-ended questions (Likert scale) was also selected because it is widely used and thus enhances credibility, together with validity and reliability; it can be administered without the presence of the researcher to enhance objectivity; and is comparatively straightforward to analyse (Croasmun & Ostrom 2011:19-20). The reliability of the research is enhanced by employing a mixed method to investigate the research problem as the use of open-ended questions also promotes the notion of descriptive validity (Cohen *et al.* 2007:134). A pilot study was performed through a convenience sample by selecting 10 employers and 5 students and lecturers across disciplines in Bloemfontein to assist in testing the validity and reliability of the method and instruments selected.

#### **1.8.6 Data analysis**

The responses to the close-ended questions were captured in table format from where it was possible to produce both descriptive and inferential statistics (My Market Research Methods 2011:1-2). Descriptive statistics include statistical procedures that can be used to describe the population studied in this regard.

Inferential statistics enabled the researcher to make predictions or inferences about the population studied from analyses of the sample selected and to generalise it to the larger population that the sample represents (Crossman 2013:1). Such statistics were required to determine whether a correlation exists between the competencies and skills required by employers in the various occupations and industries they represent, for

example, engineering, tourism, education, marketing, etc. It also enabled the researcher to determine whether an imbalance exists between the skills possessed by students and those required by employers, what the six most important skills in every industry or occupation are and the best ways to acquire those skills through WIL. The SAS version 9.1.3 software package was used as a proven package to produce reliable inferential and descriptive statistics, as stated by Dembe, Partridge and Geist (2011:1-5).

The qualitative data were analysed by means of a matrix analysis. A matrix is defined as “a set of numbers or terms arranged in rows and columns that within which, or within and from which, something originates, takes form, or develops” (Agnes 2000:887). According to Averill (2002:855),

matrices can be valuable agents in the search for relationships between/among categories of data or phenomena of interest, in examining how categories relate to particular theoretical concepts and in the search for tentative propositions linking categories of information.

### **1.8.7 Ethical considerations**

Participants were informed in writing about the aim of the research and were assured of anonymity and confidentiality. Ethical clearance for the study was also obtained from CUT.

## **1.9 Limitations**

The study is limited to a sample of active employers used for WIL at CUT during the period of 2011–2014.

The literature reviews that follow starts with a WIL review in context in the next chapter.



## **CHAPTER 2**

# **A THEORETICAL PERSPECTIVE ON WORK INTEGRATED LEARNING AND ITS POTENTIAL CONTRIBUTION TOWARDS EMPLOYABILITY**

### **2.1 Introduction**

In determining the potential contribution of Work Integrated Learning (WIL) towards employability, it is necessary to establish a common understanding of what employability is to know exactly what it is that WIL will be measured against. A similar approach will also be required to define WIL as well as an examination of what WIL entails. Once this has been done, the potential contribution of WIL towards employability can be theoretically determined.

### **2.2 Employability**

Heerde and Murphy (2009:3) allude to the importance of employability within the higher education context by indicating that higher education institutions are continually required to assess the employability of their alumni. A review of the literature has revealed that various definitions are used for employability, which involves more than meets the eye. Bridgstock (in Leong & Kavanagh 2013:2) made the same conclusion and asserts that employability involves much more than the possession of generic skills listed by graduate employers as attractive and includes the ability to navigate the world of work as well as self-management of the career building process proactively. These definitions need to be analysed to determine a definition to be used for the purpose of this study.

Hillage and Pollard (in McGrath 2009:3) define employability as the ability to gain and maintain employment, move between roles within an organisation or to another organisation, with the aim to secure work that is suitable and sufficiently fulfilling. According to the Skills for Life Network (2014:1), employability is about the knowledge, skills, attitude and behaviour one needs to get work, stay in work and do one's job well. In addition to securing a job and moving between jobs, the University of Edinburgh (2011:1) also stresses remaining employable throughout their life. The concepts of

being able to get and stay in a job and move between jobs are thus important issues with regards to employability which inherently implies that employability can also be regarded as a continuous process.

Adding to what has been established in terms of employability is the view of Yorke (2006:8), who interprets employability also as an achievement that benefits graduates, the workforce and economy. This view is also adopted by the University of Worcester (2014:1). The Higher Education Academy (2012:4) further adds that employability is not merely about getting a job but, in addition to finding a job and progressing in a career, is also about empowering and enhancing the learner. The conclusion made by Armstrong, McMahon-Beattie and Greenan (2006:3) is that, “There is thus not one universally agreed definition of ‘employability’.” How can employability then be defined?

There are different views but also similarities with regard to employability. In summarising what was presented above, employability is therefore about the skills and abilities that allow one to be employed (Cambridge Dictionaries Online 2014:1) as well as to maintain employment and be able to move around within the labour market (Bologna Process 2010:1). In adopting a definition for the purpose of this study, Helyer (2007:1) aptly concludes that employability is about a mixture of elements that may differ between jobs, but that employability is in the end about those elements that: “make a person a useful, and therefore, desirable employee”.

## **2.3 Work Integrated Learning**

In establishing a theoretical framework around WIL it is necessary to start with an analysis of what the term WIL entails to establish a common understanding of the term for the purpose of this study. This is especially significant, given that Zegwaard and Coll (2011:8, 11) have found that a diverse range of terms (cooperative education, work integrated learning, work-based learning, workplace-learning, professional training, industry-engaged learning, internships, apprenticeships, experiential learning [EL], etc.) has developed together with Groenewald’s (in Coll & Eames 2004:19) argument that terminologies are used interchangeably, as well as the description of WIL as a

chameleon term by Orrell (2011:5). It therefore has to be established what is meant by WIL and how it can be defined before proceeding with an analysis of what WIL entails and how it can be linked to employability.

### **2.3.1 Defining Work Integrated Learning**

In reviewing the literature to define WIL it was found that various terms have been used over time to refer to WIL, namely:

- Cooperative Education (Engelbrecht 2003:5; Churton & Tanaka 2008:106; Drysdale & McBeath 2014:69);
- Experiential Learning (CTM 2000:3; Wessels 2007:5; Martin 2013:132; Zegwaard & McCurdy 2014:13);
- workplace learning (Biggs & Tang 2007:25; McEwen & Trede 2014:55);
- sandwich placements (Coll & Eames 2007:132; Baxter & Burden 2008:21; Jackson 2013:99);
- practicum (Coll & Eames 2007:12; Gardner & Bartkus 2014:37);
- practice-based learning (Cannan 2008:91; Sutherland & Symmons 2013:295);
- work-based learning (Cara 2008:98; Williams 2010:624; Zegwaard & McCurdy 2014:14-15); and
- internships (Crump 2008:119; Hynie *et al.* 2011:45; Gardner & Bartkus 2014:37).

In determining what is meant by WIL, these multiple terminologies must thus be analysed to form a definition for WIL.

Coll and Eames (2007:132) provide some clarity regarding the various terminologies in use by indicating that cooperative education has a variety of names and that these often reflect its location. In the UK, for example, it is most commonly referred to as sandwich placements, while in the USA the term “cooperative education” is used more often. The identifying feature, though, is a combination of work experience with on-campus academic learning and, importantly, that learning from both sites is integrated. In terms

of location, Jackson (2013:9) also refers to sandwich degrees in the UK, cooperative education and internships in the USA and adds WIL as a form of experiential learning in Australia, which all feature a structured programme combining formal classroom learning with practical work-based activities. In the South African context, Engel-Hills *et al.* 2010:62) have found that cooperative education, EL, WIL, work-based learning and workplace learning seem to be the terms most used. They (Engel-Hills *et al.* 2010:65) also refer to two sites of learning by describing WIL as an educational approach that aligns academic and workplace practices for the mutual benefit of students and workplaces. The terminology thus varies in accordance with location, but what has also emerged is that there are two sites of learning which require alignment and integration of learning.

The fact that terminologies vary have also been determined by Purdie *et al.* (2013:117), who indicate that WIL activities occur in many forms and can range from internships to shadowing. Bates, Thompson and Bates (2013:20) have come to the same conclusion and state that WIL in its different forms (cooperative programmes, sandwich courses, practicum, internships, etc.) is aimed at assisting students to make the transition from dependent learner to professional practitioner. In pointing out that WIL thus has a long history of existence under different names such as internship, cooperative education and experiential learning, Leong and Kavanagh (2013:3) also indicate the two sites of learning and integration of learning required as referred to above which now requires closer inspection.

The integration of learning between the two learning sites was established by Heerde and Murphy (2009:3) to be an important principle across the range of WIL approaches identified. This integration needs to be formally part of the academic learning programme, according to Jackson (2013:99), which corresponds with the view of Weston, Way and Hutcheson (2003:ii) that combining learning from the work place into the academic programme is a curriculum matter. As a curriculum issue, the link between the institution and work place requires effective alignment (Edgar & Connaughton 2014:29). The implications of the alignment of learning therefore require attention.

According to Papakonstantinou *et al.* (2013:59), the bringing together of the theory of a discipline and its relevant work practice requires the involvement of industry, universities and students to form a unique tripartite relationship between the student, the employer and the university, as stated by Newhook (2013:79). For students to learn effectively through direct implementation of their professional roles in real workplace settings, a stakeholder-integrated approach is needed, which involves sustainable relationships between all stakeholders (McEwen & Trede 2014:55; Fleming & Hickey 2013:209).

In determining a definition for WIL, the common denominators identified above are that location determines nomenclature used but that fundamentally two distinct settings of learning are present, which need to be aligned effectively within a three-way partnership. These denominators can now be summarised to create a definition for WIL.

While each of the terminologies may differ with regard to location and application, they all share a fundamental belief regarding the creation of experiences that create synergies, resulting in meaningful benefits for the three stakeholders. The underlying logic is largely the same, namely to enhance the value of the learning experience through an integration of work and education (Gardner & Bartkus 2014:37).

Downey *et al.* (2002:1) also identify the integration of academic study alternated with work in industry as common denominators in terminology by stating that “work-integrated learning represented by cooperative education, where students alternate study terms with work terms in jobs that permit them to apply what they are learning”. Martin and Hughes (2009:7-8) indicate that work-based learning

aims to integrate academic study and practical work experience ... [to] ... provide a bridge for the student between the academic present, and their professional future – an opportunity to apply and merge theoretical knowledge gained in academic studies to ‘real world’ work place practical experiences ... which involves ...[a] three way partnership between the student, the work place organisation and the university.

Powell *et al.* (2008:63-81) also emphasise the role of the three-way partnership where WIL includes a combination of EL in industry with academic learning on campus.

From the above it can thus be concluded that the common denominators in the terminology used are indeed the three-way partnership that involves two distinct settings of learning on campus and in the workplace, which leads to the application and integration of classroom-based theory with learning in the workplace. WIL can therefore be described as “[a]n umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum” (Patrick *et al.* 2008:iv). For the purpose of this study, WIL is defined as a tripartite curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace. Other curricular modalities of WIL such as problem based learning, project based learning and theoretical-directed learning are not applicable to this study. Having established a definition for WIL the next step is to investigate the theoretical underpinning of WIL.

### **2.3.2 Work Integrated Learning theory**

The definition of WIL adopted above primarily focuses on the enhancement and value of learning. This seems to suggest that a closer look at what learning entails ought to be the starting point in determining the theoretical grounding of WIL.

According to Mahar and Harford (2004:5), there is no one, simple definition of learning since learning is a complex concept that is defined differently according to the context in which it is being discussed. Within this context, Smith (2003:1) has examined learning as a product and as a process. He (Smith 2003:2-3) has found that learning is regarded as a product when it leads to a change in behaviour and is approached as an outcome, but when the emphasis is on what happens when the learning takes place, learning could be regarded as a process by which behaviour changes as a result of experience. Illeris (2010:5) furthers the argument and postulates that the most fundamental condition of human learning is that all learning includes an external interaction process between the learner and his or her social, cultural and material environments as well as an internal psychological process of elaboration and acquisition in which new impulses are connected with the results of prior learning. An understanding of the theory of learning is therefore imperative for this study.

### 2.3.2.1 *Student development and learning*

Within the context of student development and learning, Behaviourist, Cognitive and Constructivist theories of learning have been identified as the three basic types of learning theory (University of California Berkeley 2011:1).

According to the Center for Research on Learning and Teaching (2014:1), Behaviourism assumes an essentially passive learner starting with a clean slate responding to environmental stimuli. Behaviour is shaped through positive or negative reinforcement, which increases the probability that the antecedent behaviour will happen again. In contrast, punishment in positive (application of a stimulus) or negative (withholding of a stimulus) form decreases the likelihood that the antecedent behaviour will happen again. Learning is therefore defined as a change in behaviour in the learner. The University of California Berkeley (2011:2) provides a more condensed version of this theory by indicating that learning is viewed within the behaviouristic theory as the passive absorption of a predefined body of knowledge that is promoted by repetition and positive reinforcement. Consistent repetition of what is to be learned is required for learning to occur, resulting in behavioural changes in learners.

Discontent with the perceived inadequacies of Behaviourism led to the development of another school of thought as Behaviourism could not easily explain why people attempt to organise and make sense of the information they learn. According to Kristinsdóttir (2008:1), many ideas and assumptions of Cognitivism can be traced back to the theories of Jean Piaget of Switzerland. Piaget viewed the development of human cognition as the continual struggle of a very complex organism trying to adapt to a very complex environment and essentially views Cognitivism as the need to integrate new information with, rather than adding on to existing information. Ormrod (1999:5), a proponent of cognitive learning theory, therefore also sees learning as an active process in which learners relate new information to previously acquired information and states that learning will most likely happen in accordance with the strength of the correlation between new and existing knowledge.



The Trinity College Dublin (2002:1) states that Constructivism favours processes over end products. Knowledge is not received from outside, but by reflecting on experiences; thus, learning is the process of adjusting our mental models to accommodate new experiences. Constructivism implies that people learn best when they actively construct their own understanding and the emphasis is resultantly placed on the learner rather than the teacher. Mahar and Hartford (2004:8) also state that constructivist theories imply that learners actively construct frameworks of understanding by using existing knowledge and new information and quote the concept of “scaffolding”, relating to Vygotsky’s work of 1962, to describe the support that is given to students to construct and extend their skills. They (Mahar & Harford 2004:9) state that social and constructivist theories of learning do not generally investigate the nature of the experience of learning, but that EL theories build upon social and constructivist theories and place experience at the centre of the learning process. This leads to an investigation of the theory of EL that follows next.

#### 2.3.2.2 *Experiential learning*

Although there are a number of disciplines that inform the field of WIL, EL theories in particular provide more clarity on the nature of the types of experience from which students can learn as well as the importance of critical reflection to ensure the experience is meaningful, according to McLennan and Keating (2008:4). WIL is an educational process and experience with foundational pedagogy and theory that can be aligned with the processes and outcomes of experiential learning which intends to maximise learning through experience as stated by Smith *et al.* (2009:23) which necessitates a closer look at the origins of EL theory.

Burke *et al.* (2009:18) point out that EL theory dates back to the 20<sup>th</sup> century and they discuss the importance of the concept of experiential learning to the work of John Dewey (1916). The significance of human experience was a fundamental component of his ideas about learning, as Dewey believed that progress, in educational terms, was in the development of new attitudes towards, new interests in, and a new understanding of experience. Education is regarded as a continuing reconstruction of experience by



Dewey who defined experience as physical action, the consequences thereof, and the individual's judgement (reflection) of the consequences of the action. Based primarily on the psychological and philosophical work of Dewey, as well as other prominent 20<sup>th</sup>-century scholars who gave experience a central role in their theories of human learning and development (notably William James, Kurt Lewin, Jean Piaget, Lev Vygotsky, Carl Jung, Paulo Freire and Carl Rogers), Kolb defines EL as "the process whereby knowledge is created through the transformation of experience" (Passarelli & Kolb 2012:3).

Integrating the work of these foundational scholars, Kolb (in Passarelli & Kolb 2012:3) proposes six characteristics of experiential learning:

- Learning is best conceived as a process and does not end at an outcome but occurs through the course of connected experiences in which knowledge is modified and re-formed.
- All learning is re-learning. Learning is best facilitated by a process that draws out the learners' beliefs and ideas about a topic so that they can be examined, tested and integrated with new, more refined ideas. This is also referred to as Constructivism where individuals construct their knowledge of the world based on their experience.
- Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world. Conflict, differences and disagreement are what drive the learning process. These tensions are resolved in iterations of movement back and forth between opposing modes of reflection and action and feeling and thinking.
- Learning is a holistic process of adaptation. Learning is not just the result of cognition but involves the integrated functioning of the total person—thinking, feeling, perceiving and behaving.
- Learning results from synergetic transactions between the person and the environment. In Piaget's terms, learning occurs through equilibration of the dialectic processes of assimilating new experiences into existing concepts and

accommodating existing concepts to new experience. Following Lewin's famous formula that behaviour is a function of the person and the environment, EL theory holds that learning is influenced by characteristics of the learner and the learning space.

- Learning is the process of creating knowledge. Knowledge is viewed as the transaction between two forms of knowledge: social knowledge, which is co-constructed in a socio-historical context, and personal knowledge, the subjective experience of the learner. This conceptualisation of knowledge stands in contrast to that of the 'transmission' model of education in which pre-existing, fixed ideas are transmitted to the learner.

"Knowledge results from the combination of grasping and transforming experience." (Kolb 1984:41) Grasping experience is the process of taking in information and transforming experience refers to how individuals interpret and act on that information. The EL model portrays two dialectically related modes of grasping experience, namely Concrete Experience (CE) and Abstract Conceptualisation (AC). The transformation of experience modes are referred to as Reflective Observation (RO) and Active Experimentation (AE). Learning thus occurs because of the resolution of creative tension among these four learning modes. This process is depicted as a learning cycle where the learner "touches all the bases" – experiencing (CE), reflecting (RO), thinking (AC), and acting (AE) – in a recursive process that is sensitive to the learning situation and what is learned, as illustrated in Figure 2.1 below (Passarelli & Kolb 2012:3-4).

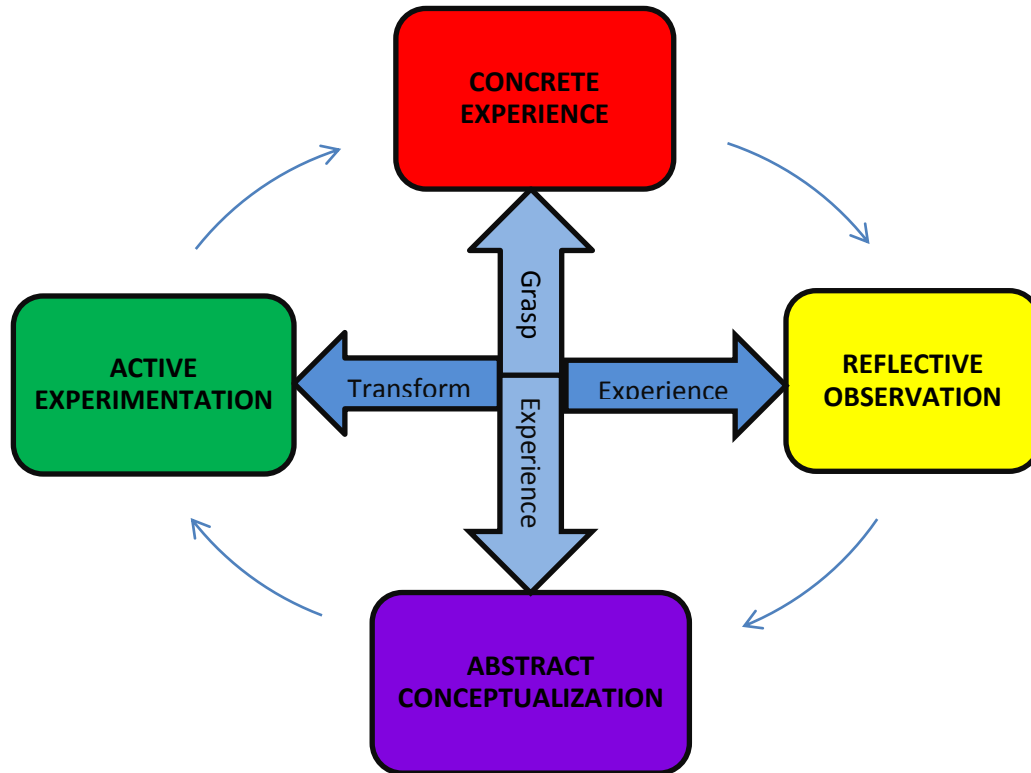


Figure 2.1: Kolb's EL cycle (Passarelli & Kolb 2012:4)

The concrete experiences form the basis for observations and reflections where the reflections are assimilated and transformed into abstract concepts from which new implications for action can be drawn. The EL cycle seems to indicate that students will be engaged actively in the learning process. McLennan and Keating (2008:4) have come to the same conclusion and found,

it is a teaching and learning approach which has the potential to provide a rich, active and contextualised learning experience for students which contributes to their engagement in learning. This is based on recognition that the workplace is a unique site for learning which affords learners different opportunities to learn than the lecture theatre or classroom does.

Elaborating on the workplace and the different learning opportunities it provides, Dåderman *et al.* (2013:62) state that it concerns all forms of learning and development at work such as learning processes, conditions, content and consequences for

individuals in the workplace. EL therefore involves various dimensions, which require further investigation.

### 2.3.2.3 *Dimensions of experiential learning*

According to McCurdy, Zegwaard and Dalgety (2013:234), traditional higher education teaching is generally concerned with a unidirectional transmission of knowledge where the lecturer presents material to many students with the focus on individual competencies. Tension is thus created between the need to pass on facts and concepts to many students and the need to stimulate thought and enhance cognitive performance. However, WIL is a sociocultural experience, which shapes interpretations, meaning schemes and knowledge formation, which in this type of contextualisation is difficult to teach or learn in other environments than the workplace, since the workplace provides unique pedagogies that form useful epistemological tools for facilitation (Choy & Delahaye 2009:3).

Sociocultural theory suggests that learning is enhanced when it is not unidirectional, but is situated within a community of practice, has some social scaffolding and is supported and mediated by workplace tools. The transmission of knowledge in this way becomes a process of learning that is personalised, collaborative and reflective (McCurdy *et al.* 2013:234). Wiredu (2005:51) has found that WIL is the epitome of social learning that immerses the learner in a work environment that was collaboratively set up. Since a learning space is what the learner experiences it to be, the psychological and social dimensions of learning spaces have the most influence on learning (Passarelli & Kolb 2012:5).

It thus makes sense that if learning is to occur, it requires a space for it to take place. The value of workplace learning experiences is therefore that they offer a rich variety and depth of learning spaces. Dimensions of learning space include physical, cultural, institutional, social and psychological aspects, which are all brought together in EL theory in the experience of the learner which the person experiences subjectively (Passarelli & Kolb 2012:5). It was indicated above that it is required of the learner to touch all four bases, which will therefore necessitate the creation of a learning space

that will allow for a full engagement of the learner in the learning cycle. It can thus be deduced that the space needs to be challenging, but also safe and supportive to allow learners to be in charge of their own learning as well as allow for time for the repetitive practice that develops expertise. This is especially significant, given the assertion of Passarelli and Kolb (2012:6) that the EL cycle is actually a learning spiral. This implies that when a concrete experience is enriched by reflection, given meaning by thinking and transformed by action that the new experience created becomes richer, broader and deeper. Further iterations of the cycle continue the exploration and transfer to experiences in other contexts. In this process, learning is integrated with other knowledge and generalised to other contexts leading to higher levels of development.

Also drawing on sociocultural theories of learning, Eames and Bell (2005:153-169) argue that to understand co-op learning, and co-op as an educational strategy, one needs to be cognisant of the importance of contextual factors, especially sociological factors. The concept of legitimate peripheral participation is explained by way of a student learning to become a scientist by working alongside scientific experts. The opportunity to be exposed to and learn from that scientific workplace led to a deeper understanding of what it means to work in science. A further dimension is the notion of mediated action in which learning in the workplace is a result of the specific sociocultural context in which learning occurs, for example, the use of specific language and acronyms will differ between a chemistry laboratory and computer laboratory. The concept of distributed cognition also needs to be recognised where knowledge is not resident solely in one person such as the sales manager, for example, but is spread across the workplace from the workshop technicians to administrative and human resources staff. Zegwaard and McCurdy (2014:14) confirm that the sociocultural view of learning where epistemological development occur by way of situated learning (which assumes that learning is a function of the activity, environmental context and culture) is applicable to students engaged in EL. They (Zegwaard & McCurdy 2014:15) conclude that work placements are a form of EL where the students learn (by way of situated learning) the community's behavioural norms in addition to frequently used cognitive skills and refer to the process of being incorporated into the community of practices and adopting its norms as enculturation.

Work placements are thus more complex than standard university subjects are, as they involve multiple relationships as well as a diversity of settings and experiences, which require active engagement by students (Sturre *et al.* 2012:235). Consistent with this, Kolb's model of EL suggests that students are likely to learn about themselves as well as for themselves in a work-based context (Purdie *et al.* 2013:118). Richards, Sweet and Billett (2013:251) refer in this regard to the enacted curriculum, which is the experiences provided to students by educational institutions, and the experienced curriculum, which refers to how students engage and learn through the experiences provided. Billet (in Martin *et al.* 2012:24-25) speaks of a third dimension, namely the expected curriculum which refers to what students actually experienced as they engaged with what was intended and provides a view that WIL characterises all three components that extend beyond conventional expectations from lecture-based courses.

According to Bates (2008:12), each placement experience is thus unique due to the diversity of settings and experiences in the workplace, Betts *et al.* (2009:104) therefore characterise WIL as a pedagogical philosophy that emphasises the values and qualities that come from integrating academic studies with work life experiences, which require a closer look at WIL as pedagogy.

#### 2.3.2.4 *WIL as pedagogy*

Coll and Eames (2004:274-275) conclude that a successful WIL programme requires strong curricula and pedagogy underpinned by theory, as well as objectives that are relevant and appropriate to all parties involved. The aim is therefore to find a balance between being vocationally focused and maintaining clear educational goals. Apart from focusing on equipping students with skills that will help them find meaningful employment, the objectives set for the WIL programme and the work component should allow the student to engage in critical thinking and transformative learning. The WIL curriculum should therefore set out to build a bridge of learning between the university and the workplace, according to Patrick *et al.* (2008:39). A structured framework for WIL and treating it as an integral and integrated part of the curriculum rather than as a bolt on experience is thus advocated by Leong and Kavanagh (2013:2-3).

The rationale for these thoughts is to be found in the enhanced complexity of work placements compared to standard university subjects as explained above and that the workplace therefore presents greater challenges to students than reading texts and writing essays, as postulated by Boud and Falchikov (2006:399). A good application of WIL will thus occur when it is woven into the entire fabric of the relevant programme of study as an assessed activity, threading the theoretical knowledge and learning outcomes with an understanding of professional practice and expectations together with the competencies necessary to be successful as asserted by Martin *et al.* (2012:24).

A greater responsibility must therefore be given to learners to identify the knowledge and skills relevant to their work experiences they need to learn. This requires of assessment to be conceptualised in terms of participation in practice scenarios and to encourage learners to engage actively in self-assessment (Boud & Falchikov 2006:410). The importance of self-reflective writings to capture and enhance the learning that has occurred is also emphasised by Beeth and Adadan (2006:103-120). Sturre *et al.* (2012:228) further emphasise the self-concept of the individual in this process by indicating that individuals are motivated to accrue skills and knowledge whenever they perceive their identity as stable and enduring.

Furthering the focus on the individual, Raelin *et al.* (2011:18) state that the field of cooperative education and internships has relied on the use of the concept of self-efficacy to link practice-oriented learning processes to learning outcomes. Raelin *et al.* (2011:18) define self-efficacy as an individual's perceived level of competence or the degree to which she or he feels capable of completing a task and they point out that self-efficacy is a dynamic trait that changes over time, which can be influenced by experience. The development of the measure known as work self-efficacy by Raelin *et al.* (2011:31) adds another dimension to explaining WIL's contribution to undergraduate studies. It is based on the enhancement of a special form of self-efficacy that addresses the confidence acquired during WIL in handling the demands and requirements of the workplace. With the identification of the components of work self-efficacy, the focus can now be on the specific meta-competencies associated with this form of efficacy, namely work learning, problem solving, stress management, role identification, teamwork,

sensitivity and handling politics. The link or transfer of learning is thus an important concept in the pedagogy of WIL, as confirmed by Sator & Amundsen (2011:52-54), namely that the transfer of learning is fundamental to WIL.

WIL as pedagogy is thus dependent on a balanced and structured approach that includes all parties involved, encapsulated by an integrated curriculum approach that fosters the independence of the student to facilitate the transfer of learning. Freudenberg *et al.* (2008:160-162) provide vindication for a more formal, structured and integrated approach with the inclusion of a professional development programme as part of an undergraduate programme, which has resulted in students being able to see the linkages between their academic studies and their desired professional employment outcomes. The University of Canberra (2010:4) also concurs by stating,

Work-integrated learning is deliberate and intentional learning in work, supported by appropriate induction of students and supervisors, and imaginatively embedded assessment.

How then can WIL be conceptualised as an effective pedagogy for students?

A study was conducted by Jacobs (2010:78-81) regarding the roles of WIL and how such roles can be quantified when measured against the achievement of Critical Cross-Field Outcomes (CCFOs). The study was based on an empirical mixed-method triangulation, allowing the use of both qualitative and quantitative methods to address the research problem. The sample size was 35, constituting the third- and fourth-year groups in the hospitality management programme at a higher education institution in South Africa. The responses to the open-ended questions of the qualitative investigation were captured verbatim on a matrix. These responses to the different questions were then analysed to identify commonalities and trends. The commonalities and trends identified per question were then labelled as themes. These themes represent the roles identified by students for WIL. A calculation was then done to determine how many responses per question could be grouped under the various themes identified to determine the relative importance of each theme or role identified.



A summary of the qualitative analysis described above and roles identified for WIL are presented below in Table 2.1.

*Table 2.1: Roles identified for WIL*

<b>Questions</b>	<b>Roles Identified</b>		
1.1 What do you think are the main reasons for including WIL as part of Hospitality Management?	<b>Experience of and preparation for industry</b> (31)	<b>Application of theory</b> (11)	
1.2 What have you learned from WIL?	<b>Skills Development</b> (21)	<b>Working with people</b> (14)	<b>Application of theory</b> (14)
1.3 What do you value most about the WIL you have completed?	<b>Knowledge and experience</b> (32)	<b>Personal development</b> (11)	<b>Contacts in industry</b> (8)
1.4 Describe the effect (if any) that WIL has had in understanding the course content of Hospitality Management.	<b>See the application of theory</b> (19)	<b>Better understanding of theory</b> (14)	
1.5 What can you observe about yourself that is different than before you were involved in WIL?	<b>Improved self-confidence</b> (27)	<b>Enhanced maturity</b> (11)	<b>More responsible</b> (9)
1.6 What advice would you give to other students regarding WIL?	<b>Display maturity</b> (30)	<b>Act in a responsible manner</b> (27)	<b>Be self-confident</b> (21)

Interesting to note is that questions 1.5 and 1.6 have produced the same roles, namely the importance of self-confidence, maturity and responsible behaviour. The implication is that what students have observed as different about them upon completion of WIL (question 1.5), is exactly the advice that they would give to other students regarding WIL (question 1.6). It is thus evident that the students have undergone personal

development during their WIL experience and that they could reflect on their experiences to provide advice from a personal point of view, which corresponds with similar findings regarding personal development by Fleming *et al.* (2009:194-195); Betts *et al.* (2009:99-103); Freudenberg *et al.* (2008:161); and Kramer & Usher (2011:25).

It can therefore be stated that WIL is an effective pedagogy, since the concrete experience that WIL presented to students enabled them to reflect (think back on their experiences) and form abstract concepts (themes indicated like personal development – self-confidence, maturity and responsible behaviour) that could be applied in new situations (advice given to other students regarding WIL). Are there any other benefits that can be attributed to WIL besides being an effective pedagogy though?

### **2.3.3 Benefits of WIL**

Coll and Eames (2007:133-134) have come to the conclusion that “Cooperative education in one form or another is now a major ‘industry’ worldwide and is practiced widely in the USA, UK, Australia, the Asia-Pacific region, South Africa, and Europe.” Despite the popularity and success of WIL, they have found that it has a relatively low public profile. Eames (in Coll & Eames 2007:134) provides some clarity in articulating that WIL is something of an intuitive concept that appeals to almost everyone involved in hiring staff or training students, which also provides benefits to the three principal parties engaged, namely students, employers and educational institutions. The kind of benefits derived from WIL is important to determine within the context of this study’s focus to optimise the contribution of WIL towards the employability of students.

A study of the literature revealed that there is a wide variety of benefits accruing from the tripartite partnership. In discussing the benefits of WIL, the focus will be placed on how students benefit as the centre of attention of the study. Reference will also be made to the benefits applicable to employers and educational institutions as the starting point for the discussion of WIL benefits.

The benefits of WIL to employers are predominantly found in the major reason why employers participate in WIL programmes:

- WIL placements are used by employers as a unique way of assimilating students into the work environment, which, according to Bates and Bates (2013:55), provides the ideal platform to recruit graduates. This view is supported by Sattler and Peters (2012:6), who have found, “Employers who provided WIL opportunities overwhelmingly preferred to hire graduates who had gained WIL experience at their own workplace.” Further evidence is provided by the 2012 Internship & Co-op Survey, which reinforces the fact that internships are a vital component of employers’ college recruiting programmes (National Association of Colleges and Employers 2012:1-3).
- Weisz and Chapman (in Coll & Eames 2007:134) have determined that the overall employer benefits are financial by nature (lower recruitment costs and increased productivity), but that there are also issues relating to image such as addressing equity in employment and an enhanced public image of major multi-national corporates.
- The primary benefits to employers are summarised by the New Zealand Association for Cooperative Education (2014:1) and the Canadian Association for Cooperative Education (2005:6) as follows:
  - Reduced recruitment and hiring costs. Employers have a cost-effective means of evaluating future employees by means of an extended interview.
  - Effective human resource management where employers can meet short-term needs due to vacation schedules, training commitments and peak workloads.
  - Employers are considered co-educators as they provide learning beyond the bounds of the classroom and have the opportunity to influence the educational process and curricula to make it more relevant to the work situation.

Universities are constantly looking for strategies to improve their financial and competitive position as well as branding in order to build its reputation and attract better-quality students, according to Kennedy (2013:1). In this regard, Heerde and Murphy

(2009:3-4) have found that universities' benefits in the WIL partnership include enhanced student recruitment, stakeholder input into programme development and enhanced links to industry, which often result in on-going, commercially beneficial, relationships. Haddara and Skanes (2007:72) have also found that as students become aware of the benefits of cooperative education, their choice of which post-secondary institution to attend is affected. They also concur that benefits that educational institutions may gain include enhanced relationships with industry, curriculum development as well as staff development through exposure to industry. The University of Massachusetts Dartmouth (2014:1) indicates the same benefits as the authors above and adds enhanced visibility as an additional benefit to the university through staff and specifically the students' interactions with business and industry, which also produces benefits for students.

Turning one's attention to the way that students benefit from WIL, Dressler and Keeling (2011:261-276) provide three main categories for the classification of student benefits. These categories are academic, personal and career benefits, which provide a useful format to use in examining student benefits below.

Academic benefits to students include the following:

- Increased motivation to learn, increased ability to finance tuition and improved perception of benefits of study (Dressler & Keeling 2011:261-276);
- Positive effects on students' learning, including identifying the relevance of theoretical concepts taught in class, putting theory into practice as well as an appreciation that academic success is not the only attribute for career success were reported by Freudenberg *et al.* (2008:161);
- Deep learning and the enhancement of learning (Choy & Delahaye 2009:9; McLennan & Keating 2008:4; Papakonstantinou *et al.* 2013:59); and
- Wilson and Fowler (2005:87-101) conclude that active learning approaches such as WIL are correlated with students engaging in a deeper approach to their learning and thus enhanced academic performance. This is substantiated by

Heriot *et al.* (2007:427-434), who have found that during active learning students “are moved into a new realm of learning”.

- Reddan (2013:223-224) has found that WIL improves students’ motivation towards their studies, which promotes student engagement and enhances their perceptions of their educational experience and self-efficacy.
- Drysdale and McBeath (2014:70) have determined that participation in cooperative education is related to better academic achievement, since students who study in a work-integrated environment are more aware of the connection between academic learning and workplace success and thus more motivated to perform well which corresponds with the finding of Hughes, Mylonas and Benckendorff (2013:278).
- WIL leads to enriching students’ understanding of the subject matter and enhanced academic performance, according to Kozar and Marcketti (2008:310).
- Brodie and Irving (2007:18) state that WIL students are “able to apply and comment on their knowledge and their experiences, and that this process provides students with their own justification for future learning”.

It needs to be noted that the increased motivation, together with an enhancement of deep learning in connecting theory and practice, corresponds with the definition of WIL established for this study. The benefit of developing self-efficacy can also be traced back to the pedagogy of WIL, which accentuates the personal development of students, focused on next.

A wide variety of personal benefits for students was found in the literature studied:

- Dressler and Keeling (2011:261-276) report increased autonomy, increased communication skills and improved time management as personal benefits to students.
- Heerde and Murphy (2009:3) have found that personal skills developed are confidence, collaboration, higher-order thinking skills, decision-making, interpersonal, and self-management.

- Costley (2007) and Crebert (2004) (both in Heerde & Murphy 2009:4) both reported an understanding of how work systems operate, workplace competencies, critical thinking skills, the application of theoretical knowledge within the changing context of workplace environments, professional networking, professional behaviour, engagement in reflective practice and leadership skills as aptitudes resulting from practical work placements.
- Freudenberg *et al.* (2008:161) have determined increases in student job knowledge and skills, improved attitudes and behaviours towards work readiness and the development of communicative abilities within the WIL environment.
- The findings of Purdie *et al.* (2013:123) suggest that WIL has a much wider reaching influence than simply moulding better students, as the effect is one of a more hopeful and confident adult, emotionally perhaps better equipped to face the challenges of the employment market and life beyond.
- Fenton (2013:166) has established that students started to use solution-focused strategies, recognised individual strengths and were more confident upon the completion of a WIL placement in industry.
- Increased confidence is also reported by Reddan (2013:224).
- Hughes *et al.* (2013:278) conclude that students developed the practical abilities and interpersonal skills required to excel in their chosen field.
- Rampersad and Patel (2014:4) have found that WIL leads to the development of self-efficacy, which is becoming a recurring concept in this study.

Now that the academic and personal benefits have been established, the career benefits are to be determined, which brings the focus even closer to the purpose of the study. The following career benefits can be stated as attributed to WIL:

- Dressler and Keeling (2011: 261-276) have found increased employment opportunities and career clarification as a result of WIL.

- WIL programmes have demonstrated that WIL activities address concerns regarding graduate employment readiness according to Freudenberg *et al.* (2008:161).
- The study of Bates and Bates (2013:54) reveals that students believed that the WIL experience had facilitated the transition into the workplace because of the additional knowledge of context, role expectations and exposure to the complexity of the work. They also found that those participants who had the opportunity to do a WIL placement felt that they were more prepared for work than those who did not.
- Patrick *et al.* (2008:13) have determined that WIL is generally accepted as a powerful vehicle for developing generic or professional skills and provides students with the opportunity to improve their employability and work readiness, which is evidenced by the finding of Robeck *et al.* (2013:44), for example, that a college internship leads to graduates jobs.
- Co-op students have higher rates of employment and are viewed by employers as more desirable and competent candidates than their non-coop peers, as reported by Drysdale and McBeath (2014:70).
- According to Leong and Kavanagh (2013:3), WIL is also a vehicle for developing essential graduate attributes.
- Papakonstantinou *et al.* (2013:59) indicate that effective WIL programmes increase students' chances of employability which Svacina (2012:77) has found to be true through gaining professional occupational experiences as part of WIL.
- WIL enhances the development of appropriate knowledge, skills and capabilities for entering the world of work as well as the confidence in students to be able to articulate these to employers, as reported by Butcher *et al.* (2011:3).
- Jackson (2013:99) has established that WIL is an instrument for enhancing professional practice and developing work-readiness in new graduates by enhancing outcomes such as teamwork, communication, self-management, problem solving and students' understanding of the world-of-work. WIL therefore

augments graduate employability in building students' confidence in their capabilities in professional practice by developing a greater appreciation in students for the importance of employability skills through a better understanding of required skill standards and their ability to perform in the workplace.

Richardson *et al.* (2013:27) refer to the contemporary debate that focuses on the importance of employability skills to enable graduates to 'hit the ground running' in the workplace. Employers therefore seek graduates with a range of skills that minimize additional on-the-job training, as also indicated as a benefit to employers above. The benefits of WIL in terms of the career development of students seem to provide a link between WIL and employability, as it provides real opportunities for students to develop and hone these employability skills, according to O'Reilly, McCall and Khoury (2010:1).

#### *2.3.3.1 The link between Work Integrated Learning and employability*

Patrick *et al.* (2008:v) have found that WIL is seen by universities as a valid pedagogy and as a means to respond to demands by employers for work-ready graduates as well as offsetting the increasing cost of education (Orrell 2004:1). Embedding WIL in the curriculum thus offers universities an alternative way to enable students to enhance their employability skills (Jackling, Kaider & Clark 2013:77). This is an appropriate approach, since the practice of WIL is rightly viewed, as determined by Usher (2012a:5), as important in the development of career-ready students with identifiable employability skills. Fleming *et al.* (2009:183) concur with this view, having found that WIL experiences aim to develop appropriate competencies that enhance employability, which is increasingly providing a point of difference for students in enhancing their employability (Martin *et al.* 2012:34).

The link between WIL and employability is further accentuated by the fact that four of the nine recommendations in the (Australian) Business, Industry and Higher Education Collaboration Council report on graduate employability already proposed WIL as a mechanism to develop graduate attributes and employability skills during 2007 (Patrick *et al.* 2008:3). The growth of WIL at universities therefore reflects both government and



industry concern about addressing skill shortages as well as making students more employable upon graduation (Jackling *et al.* 2013:77).

Even in China the mismatch between the supply of university graduates and contemporary organisations' staffing demands is becoming increasingly evident, to the point where today, as in many other national contexts, both interns and host organisations regard internships as a preferred pathway into entry-level professional positions (Rose 2013:89). One internship programme alone (IBM's Blue Pathway programme) offered 500 internship positions in China for 2013. However, Ferns and Moore (2012:207) caution that WIL should not be perceived as a quick-fix solution to national economic challenges and workforce inadequacies, but that it is an effective means of preparing graduates for the world of work.

## **2.4 Conclusion**

In conclusion, it has been determined that WIL is a tripartite curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace. It has a sound grounding in learning theories resulting in an effective pedagogy that leads to benefits for academic institutions, employers and students in particular. These benefits, together with the pedagogy of WIL, provided the link between WIL and employability.

However, the literature studied and reported above revealed a gap. Although the same benefits are reported in some cases, for example, deep learning and the enhancement of learning (Choy & Delahaye 2009:9; McLennan & Keating 2008:4; Papakonstantinou *et al.* 2013:59; Wilson & Fowler 2005:87-101; Heriot *et al.* 2007:427-434), not everyone had reported the same benefits developed through WIL. Different skills or skill sets were reported, for example, increased confidence by Reddan (2013:224), practical abilities and interpersonal skills by Hughes *et al.* (2013:278) and self-efficacy by Rampersad and Patel (2014:4).

The questions that therefore arise are:

*What specifically about WIL enhances the employability of students and how can this be optimised in a strategy?*

A reason might be that “Work-integrated learning is not simply a process of students engaging in work experience with the hope that it will result in employability.” (Yorke, in Smith *et al.* 2009:23)

This still leaves the following question to be answered:

*How can the contribution of WIL towards the employability of students be optimised through the inclusion of all relevant variables in one comprehensive strategy?*

A study of the application of strategy within the higher education context is therefore required and will be dealt with in the next chapter.

## **CHAPTER 3**

# **STRATEGY WITHIN THE CONTEXT OF HIGHER EDUCATION: A THEORETICAL OVERVIEW**

### **3.1 Introduction**

In developing a strategy to optimise the contribution of WIL towards the employability of students, a common understanding of what strategy is needs to be established. Strategy therefore has to be defined before strategy as a concept is analysed. This will provide the backdrop against which the application of strategy within the higher education context can be investigated to determine an appropriate strategy for this study.

### **3.2 Strategy**

Whether strategy is traced back to its presumed ancestral origins in ancient Greece, mid-20<sup>th</sup> century developments in North America, or to the industrial economic policies throughout the golden age of capitalism, the concept of strategy is immersed in widespread dispute (Baird 2012:3). Burkus (2013:1) concurs by concluding that strategy is a cloudy word that is overused, misused and full of misconceptions. It is therefore not strange that Barrows (2014:1) determines that an estimated 60 percent of strategies are not implemented successfully. Strategy thus needs to be properly defined to obtain clarity.

#### **3.2.1 Defining strategy**

Formisano (2004:2) refers to strategy as the business word for game plan, which seems to suggest that strategy can be described as a plan to achieve a major goal or solution (Businessdictionary.com 2013:1; Oxforddictionaries.com 2013:1). Nickols (2013:1) adds more detail to the plan and states that it includes how a given objective will be achieved and is concerned with the relationships between ends and means, that is, the results we

seek and the resources at our disposal. However, is there more to strategy than a detailed plan?

Strategy is not a detailed plan or programme of instructions on its own according to Jaquier (2010:2), as it is a unifying theme that gives coherence and direction to the actions and decisions of an organisation. El-Kadi (2008:1) asserts that planning deals with situations in a controlled environment. It can thus not be regarded as one's strategy; and neither is one's vision on its own a strategy (Rivera 2013:1). Strategy is about planning to reach a vision that differentiates a company from its competitors in a positive way and encompasses overall direction as well as the many detailed activities that occur in a company (Morgan 2014:1). Strategy is also not only about trying to be number one in a given market as this merely amounts to a statement of aspiration that simply defines how well one wants to do, not what one wants to do (Brigham Young University 2014:1). Strategy should therefore include more than a detailed plan, a vision and aspirations.

*The Economist* (2013:1) has found that, over time, the word "strategy" has been drained of meaning by ubiquity and overuse, as it is also about getting more out of a situation than the starting balance of power would suggest. It refers to it as the art of creating power. It should therefore lead to a coherent set of mutually reinforcing choices (Vermeulen 2013:2). Weir (2014:1) refers to this as the essence of strategy, to make a choice about what one will do in future and, by default, what one will not do. It is the result of choices made on where to play and how to win to maximise long-term value (Favaro 2012:2). Coherent choices regarding the present and future should thus be added to the detailed plan, vision and aspirations as components of strategy.

In combining the components identified above, Hughes-Jones (2014:1-2) states that strategy is about determining what one's present situation is, creating a vision to determine where one wants to go from where one is and having a plan about how to get there. This must include choices regarding a market position, how to attract and please customers, how to conduct operations, and how to compete successfully to achieve the desired performance targets (Thompson *et al.* 2014:2). Strategy is thus intended to

drive the company forward and to power it along a path towards what it is trying to accomplish (DeWolf 2014:1). What does this tell one about a definition for strategy, though?

In conclusion, it can be stated that strategy is not a straightforward concept to define, but that key components of strategy could be identified. Based on these key components, strategy can be defined as an understanding of where you are, a clear sense of where you want to end up, an assessment of what stands in between, a decision about how to approach the challenge and a detailed course of action to undertake (Arauz 2014:2). Strategy is thus a concept that requires further investigation.

### **3.2.2 Strategy as concept**

It is clear that strategy is a multi-faceted concept that needs to be investigated as such. The approach will therefore be to determine how strategies can be classified and then which types of strategies can be identified from the classification determined.

#### *3.2.2.1 Strategy classification*

Allio and Randall (2010:29) state that in the business world, strategy is the dominant framework by which companies understand what they are doing and want to do and should contain content, process and context (Oltra & Flor 2010:615). This is required since the most perfect and complete strategies without proper implementation will be useless (Hosseini *et al.* 2011:172), as it is intended to create and maintain favourable future conditions that guarantee continuity and survival (Al-Qatamin & Al-Qatamin 2012:9) to support the creation of shareholder value (Horner 2011:35). How can business strategy then be classified?

From a more macro-perspective, generic business strategies can broadly be organised into two groups, namely typologies and taxonomies (Nandakumar, Ghobadian & O'Regan 2011:223). Stewart and Chakraborty (2011:3) state that as a mode of classification, typology groups strategies according to a range of attributes, making it possible to identify the various effective strategic organisational behaviours. Miles, Miles and Cannon (2012:774) provide more detail and postulate that strategy typologies focus

on competitive actions and provide insight as to how a particular firm within a larger industry manifests various combinations of unique and standard characteristics in support of their inimitable competitive position. Taxonomies provide a set of generic level descriptors of how a firm organises it to create and distribute value in a profitable manner (Baden-Fuller & Morgan 2010:157), which implies that taxonomies are empirically derived, based on the measurement of a few indicators of firms' strategic behaviour and represent the existence of internally consistent configurations (Nandakumar *et al.* 2011:223).

Slater, Olson and Finnegan (2011:228) have identified the typology of Miles and Snow, and that of Porter as the two dominant frameworks of business strategy. Hahn (2010:65) has found that Porter's typology uses cost leadership, differentiation and focused generic strategies as the basis for pursuing superior performance, whereas the Miles and Snow typology breaks strategic dimension into prospector, analyser, defender and reactor components. Slater *et al.* (2011:228-229) further elaborate on the Miles and Snow framework as alternative ways in which organisations approach their product-market domains (the entrepreneurial problem) and construct structures and processes (the administrative and technical problems) to implement their strategy successfully. Sollosy (2013:2-6) asserts that prospectors, analysers and defenders will opt for different strategic approaches. Prospectors tend to be more innovative and seek out new markets, whereas analysers are followers of prospectors and defenders usually remain focused on maintaining a secure niche in a relatively stable product or service area.

Reactors, by contrast, respond inconsistently to challenges with a short-term orientation driven by environmental dependence. Porter proposes that business strategy should be viewed as a product of how the firm creates a competitive advantage (i.e., differentiation or low cost) and how it defines scope of market coverage (i.e., focused or market wide) (Tanwar 2013:11). Parnell's (2010:305-306) elaboration of Porter's framework also suggests that a business can pursue superior performance by either establishing a cost leadership position (i.e. low costs) or differentiating its offerings from those of its rivals while either of these approaches may be accompanied by focusing efforts on a given

market niche. The gaining of competitive advantage is a key issue that has emerged from the discussion above as the intention of business strategies.

Applying performance measures to these frameworks, Teeratansirikool *et al.* (2013:171) state that defender firms tend to use financial measures, while prospector firms prefer to use non-financial measures. A defender is a survivor whose main aim is to protect its current business and focus on manufacturing existing designs more efficiently through competitive pricing. A prospector firm continuously explores and exploits new products or market opportunities to achieve high growth. Prospector firms tend to take a differentiation strategy and cost leadership seems more likely to be adopted by defender firms. Thus, a firm with a differentiation strategy may prefer to use non-financial measures and a cost leadership firm tends to use financial measures.

Govindarajan and Gupta (in Teeratansirikool *et al.* 2013:171) add that firms following a “build” strategy (increasing sales and market share) tend to place a greater emphasis on non-financial measures (such as new product development, market share, research and development and customer satisfaction) than firms following a “harvest” strategy by maximising short-term earnings. Worth noting is that, as scholars began to study the relationship between strategy and performance, some studies concluded that only “pure” cost leadership or differentiation strategies were associated with superior performance, whereas others found that combining cost leadership and differentiation could be optimal for some businesses (Michail 2013:2). This has led to a second perspective referred to as the combination strategy by combining low costs and differentiation-utilised synergies (Parnell 2010:306-307) and applying both strategies simultaneously rather than applying a single strategy at a time (Baroto, Abdullah & Wan 2012:120).

The resource-based view provides another perspective to strategy (Parnell 2006:1139-1140) in taking the position that internal factors explain more variance in company performance than external industry-related factors do (Voola & O’Cass 2010:247). This theory states that a company’s unique resources and capabilities provide the basis for strategy and that the strategy chosen should allow the company to best exploit its core

competencies relative to opportunities in the external environment (Seedee 2012:137). These resources and capabilities need to be utilised to generate a competitive advantage that ultimately results in superior value creation (Hsieh & Chen 2011:11-12; Stavrou & Brewster 2005:188). Superior resources (patents and trademarks, proprietary knowhow, reputation and brand equity) and the ability to utilise resources effectively (when a company has the capability to put a product faster on the market than competitors) are required to develop a competitive advantage. The company's resources and capabilities combined form its distinctive competencies that enable innovation, efficiency, quality and customer responsiveness, all of which can be leveraged to create a cost advantage or a differentiation advantage (*The World Press* 2009:1-2).

The implication is that strategies also ought to be capability driven. Such a strategy contains three elements, namely (Leinwand & Mainardi 2010:12):

- “a way to play” that is distinct (e.g. low-cost or differentiate);
- a set of capabilities that are combined to come together in a powerful “system” and enable the company to do something better than anyone else can do it; as well as
- a portfolio of products and services that complements the way to play and leverages the capabilities system,

The proposition that the firm's organisational architecture must match its business strategy is the essence of configuration theory, which posits that, for each business strategy there is a configuration of organisational characteristics that best complement the strategy to yield superior performance (Slater *et al.* 2011:228). This means that if one launches an initiative, one has to make sure it is aligned with one's corporate DNA – also known as one's core competencies or corporate capabilities – which necessitates the inclusion of the people who are going to implement the strategy from the conception thereof (Allio & Randall 2010:29).



The leading contender for the biggest new idea in strategy is most probably the blue-ocean strategy work of Kim and Mauborgne, although it has not yet achieved the currency of Porter's work according to Allio & Randall (2010:32). Kim and Mauborgne (2005:106) have developed the blue-ocean strategy as an alternative to the focus on strategies of competing by making the competition irrelevant in creating a new market space where there are no competitors – what they call a “blue ocean”. A market universe needs to be imagined composed of two sorts of oceans: red oceans and blue oceans. Red oceans represent all the industries in existence today and are referred to as the known market space. Blue oceans denote all the industries not in existence today, which is the unknown market space. In the red oceans, industry boundaries are defined and accepted and companies try to outperform their competitors to have a greater share of existing demand. Products become commodities and cutthroat competition turns the red ocean bloody, therefore the term “red oceans”. Blue oceans, by contrast, are defined by untapped market spaces, demand creation as well as the opportunity for highly profitable growth. It is thus an analogy to describe the wider potential of market space as vast, deep and not yet explored.

Facing reality again means that, in the current context of market globalisation with so many economic, political, technological and ecological mutations, companies are faced with a vast array of risks which they must identify and try to manage if they want to ensure their survival (Ben-Amar, Boujenoui & Zéghal 2014:1). The result is that the business models and theories developed in earlier years do not always apply now, according to Johnson (2011:2). To consider how companies survive in increasingly dynamic environments, leading scholars have introduced the concept of patching (Hundsnes & Meyer 2006:437) as a means of solving complex problems in which business units are mapped and remapped by adding, splitting, transferring, exiting, or combining businesses in order to adapt to changing market opportunities. The intention is to solve complex, conflict-laden tasks in which many parts interact. When broken into a quilt of non-overlapping patches, the system still constitutes equally many parts and many interactions. However, because parts comprising each patch are not interconnected with all other parts, as they were when they were all part of the same large patch, the number of connections is reduced throughout the system. Instead of

thinking of optimising the whole task, or system, optimisation is now reduced to each individual patch (Hundsnes & Meyer 2006:437).

From the above, strategy as concept can thus be broadly classified into two groups, namely typologies and taxonomies, of which the typologies of Miles and Snow and of Porter appear to be the dominant frameworks of business strategy. The gaining of competitive advantage is a key issue that has emerged as the intention of business strategies and provides a link to the purpose of this study in creating a competitive advantage for CUT over its competitors through the development of a strategy to optimise the contribution of WIL towards the employability of students. The resource-based view provides another perspective to strategy by making a company's unique resources and capabilities the basis for strategy to achieve competitive advantage and superior value. The blue ocean strategy and the concept of patching might not be as well established, but provide food for thought, as the combination strategy provides the opportunity to move beyond the adoption of a single strategy. Aykan and Aksoylu (2013:30) also conclude that there are various strategic alternatives for businesses to follow to reach their primary goals, of which the market-based view is the well-established view (Sweeney & Lillis 2012:44). The types of strategies available therefore need to be examined.

#### 3.2.2.2 *Types of strategies*

In reviewing types of business strategies, Nickols (2013:4) indicates strategy in general, corporate strategy and competitive strategy as the three basic strategies for consideration. Fernandez (2011:301) also refers to the same basic strategies as three different levels that strategy covers.

According to *The Times 100* (2013:1) and the Darden School of Business (2014:3), general strategy is concerned with how a firm develops, grows and sustains itself in terms of new assets, business expansion and cost-effectiveness.

Corporate-level strategy is concerned with market definition, namely what businesses and markets a company intends to operate in (Githens 2011:1) to which Gallagher

(2013:1) refers as the selection and development of the markets (or industries) in which a company competes.

Competitive strategy relates to the product a company makes or of service it offers, better or more cheaply than its competitors over time (Short 2014:1). Ehmke (2010:1) states that competitive strategy is employed to gain an advantage over competitors by offering customers greater value, either through lower prices or by providing additional benefits and service that justify similar, or possibly higher, prices. It essentially answers the question: Why should the customer purchase from this operation rather than the competition? Which one of the three types of strategies should then be selected for the purpose of this study?

### **3.2.3 Selection of an appropriate strategy**

Looking at the options available as identified above, a choice has to be made between general, corporate and competitive strategy. General strategy is not applicable, as it concerns growth and sustainability in terms of new assets, business expansion and cost-effectiveness, which WIL and employability are not. WIL and employability are also not concerned with the businesses and markets to be operated in as these are a given for a university. What is more appropriate to the formulation of a strategy that optimises the employability of CUT students through WIL is competitive strategy, as the intention of this strategy is also for CUT to gain a competitive advantage over major competitors. Competitive strategy is therefore selected as the most appropriate for the purpose of this study. An analysis of competitive strategy is therefore required.

#### **3.2.3.1 *Competitive strategy***

In the current era of globalisation competition among rivals, be it products or services, is inevitable (Baroto *et al.* 2012:120). The goal of every competitive strategy is therefore to achieve sustainable competitive advantage (Waweru 2011:49; Michie & Sheehan 2006:447). Palomino, Medina and Arellano (2013:89) have found that to create and maintain a competitive advantage, companies require skills to adapt to the needs of their customers and also a structure that supports a culture of continuous improvement,

especially within service-orientated industries where competition can be particularly hostile (Muafi 2009:107). A competitive strategy therefore requires a series of systematic and related decisions that give a business a competitive advantage over other businesses (Hsieh & Chen 2011:11-12). Lahovnik (2012:1040) states that competitive strategy is also about being different, which means deliberately choosing a different set of activities to deliver a unique mix of value, because it is harder for a competitor to match an array of interlocked activities than it is merely to replicate an individual activity.

According to Stefanovska (2014:2), many authors believe that competition is a clear issue that is easily defined. These authors assert that organisations that exist are competitive and those who leave the market are not competitive. However, in reality organisations operate with different costs, technology, human resources and facilities. Some organisations set strategies to lower prices or costs, while others are based on innovation and organisational change. Which organisation will then be more competitive, one may ask?

Linking with the resource-based view on strategy, Hsieh and Chen (2011:11-12) indicate the importance of skills and resources that organisations can use, such as superior staff capability, systems or marketing competence not possessed by a competitor to achieve a competitive edge. Organisational competitiveness therefore has its roots in special tools and resources characterised by value and diversity, which cannot be imitated or substituted according to Christensen (1995:727). Furthermore, culture is also mentioned by Slater *et al.* (2011:229) as a source of competitive advantage when it enables the business to execute its strategy more effectively, or efficiently due to characteristics that are not common to the cultures of its competitors and therefore acts as an invisible asset, which is difficult for competitors to imitate. Youngblood (2008:1) adds the ability to learn faster than one's competitors as key to sustainable organisational competitiveness, given the great number of outside influences of which most cannot be predicted (Calandro 2010:30). Boonpattarakarn (2012:17) state that organisational capability is the identity of a firm as perceived by both employees and customers and represents the firm's ability to perform better than

competitors do, using a distinctive set of resources, systems and structures. Pertusa-Ortega, Molina-Azorín and Claver-Corte's (2010:1282-1286) refer to this capability as a meta-resource, which has an impact on performance levels to create value for customers (Pacheco-Ornelas, Cuevas-Rodríguez & Rodríguez-Pacheco 2012:18). Akbolat (in Aykan & Aksoylu 2013:30) asserts that the main idea of the preceding arguments is that a firm's resources and capabilities, such as organisational structure, contribute to the development of competitive strategies that seek to satisfy customers' needs better than competitors do; and hence improve firm performance. It has to be borne in mind, though, that resources and capabilities are not valuable in themselves and that a valuable resource-capability combination is required that distinguishes a firm from its competitors in the eyes of its customers. Whatever strategy is developed from this study will therefore have to be cognisant of the potential of CUT's resources and capabilities as well as the possibility that it can be configured in such a way that an inimitable service can be delivered that is valued by its customers.

In practice this will mean that each organisation formulates its specific competitive strategy according to its own analysis of internal strengths and weaknesses, the value it can provide, the competitive environment and the needs of its customers (Bordes 2009:5). In addition, Guan *et al.* (2006:971) make the point that strategic capability should also be accounted for as it relates to the ability of the organisation to understand all kinds of external relations and adapt to the external environment. To gain a competitive advantage in a fast-changing environment, Liu and Wang (2010:1500) state that firms must continuously adjust to fit that environment, which can be accomplished through maintaining good customer relationships to stay abreast with customers' needs and wants over time. The continuous assessment of the strategy employed is thus of critical importance (Papadelis, Flamos & Androulaki 2012:488).

Acquaah and Yasai-Ardekani (2008:347) and Carriger (2011:304) indicate that Michael Porter has developed the concept of generic competitive strategies to represent different strategic orientations a firm should pursue in order to realise its goals. While each typology has been the focus of research attention, Porter's is the best known and considered superior when separating firms according to strategic pursuit (Bush &

Sinclair, 1992; Campbell-Hunt, 2000, in Hahn 2010:65). In addition, Hsieh and Chen (2011:13) have found that Porter's generic strategies remain the most commonly supported and cited theory in key strategic management textbooks and literature as it also captures the essence of more complex business strategies and plays a significant role in differentiating various strategic configurations. It is thus the dominant paradigm of business strategy (González-Benito & Suárez-González 2010:1028).

Nickols (2013:1) and Allison (2013:2) also cite the work of Harvard Professor Michael Porter as the foremost opinion regarding competitive strategy. Their discussion of Porter's three types of competitive strategy is summarised as follows by Walters (2013:5) and Griffin (2013:2):

- The cost leadership strategy is employed when organisations compete for the largest number of customers through price when goods or services are standardised.
- The differentiation strategy is called for when a product or service is to be provided with distinctive qualities that are valued by customers to set one apart from the competition.
- A focus strategy is required when one aims to serve a limited group of customers better than one's competitors who serve a broader range of customers do.

Baroto *et al.* (2012:122) note that companies following a differentiation strategy strive to create and market unique products for varied customer groups with the aim to create a superior fulfilment of customer needs in one or several product attributes in order to develop customer satisfaction and loyalty. In turn, this can often be used to charge a premium price for the products. It will thus be more appropriate for this study to explore the differentiation strategy to develop students in such a way through WIL to possess distinctive qualities valued by CUT customers. This will set CUT apart from its competition by structuring the WIL component in such a way that the employability of CUT students is optimised. It is therefore required to examine what differentiation strategy entails.

### 3.2.3.2 *Differentiation strategy*

A generic strategy of differentiation aims to create a unique product or service (Gallagher 2008:1). Teeratansirikool *et al.* (2013:170) state that it represents an integrated set of actions taken to produce goods or services (at acceptable cost) that customers perceive as being different in ways that are important to them. It is therefore about adding a set of meaningful and valued differences to distinguish the company's offering from competitors' offerings (Kotler 2003:315), in such a way that the customer is willing to pay a price premium that exceeds the additional cost of the differentiation (Yoo, Lemak & Choi 2006:354-355).

Differentiation strategy is thus intended for the following:

- To create differentiated products and services that are perceived as unique by customers, provide value to them and create loyalty (Hsieh & Chen 2011:14).
- A firm that pursues a differentiation strategy seeks to create a perception in the minds of customers that their products or services possess superior characteristics that are unique from those of its competitors in terms of image and reputation, reliability, design features and quality (Acquaah & Yasai-Ardekani 2008:349; Baroto *et al.* 2012:122).

Gill and Meyer (2008:72, 103) state the importance of practices to deliver on innovation and quality since globalisation has led to more intense competition with increased customer demands and as such, a differentiation strategy provides greater scope to produce products with more valued, desirable features as a means of coping with such demands (Spencer, Joiner & Salmon 2009:85). Elaborating on the importance of innovation and quality, Aykan and Aksoylu (2013:30) postulate that differentiation strategy covers efforts towards quality-based development when businesses try to make their products and services unique and privileged. These efforts are described by Dias and Rodriques (2010:18) and Jebrin (2012:3) as competitive advantage translated through quality. Mosakowski (1993:820-821) stresses that the product or service must also be imperfectly imitable to avoid imitation or substitutes. The key assumptions



therefore behind a differentiation strategy are that customers are willing to pay a higher price for a quality product or service that is distinct (or at least perceived as such) in some important way and need to become more loyal and less price sensitive, according to Bordes (2009:9). The differentiation strategy thus hinges on an organisation's ability to innovate and provide unique and quality products or services (Hsieh & Chen 2011:17-18).

Spencer *et al.* (2009:85) have found that generic differentiation strategy has been developed further into strategies that are more specific, such as differentiation by product and service as well as image in responding to the complexity of the business environment. Baykal and Delagarde (2011:8) also indicate differentiation by product, service and image, but add personnel differentiation as another strategy, which seems to be logical given the link established between competitive strategy and the resource-based view above.

Product differentiation is the process by which a product is distinguished from others by making it more attractive than those of competitors through superior quality or price, as well as other differences such as packaging, a unique advertising campaign, sales promotion or distribution chain (Baykal & Delagarde (2011:8). According to Kelchner (2013:1), product differentiation can also include a marketing strategy to deliver a message that the product is positively different from all other similar products available and includes the following:

- When a company uses a differentiation strategy that focuses on the cost value of the product versus other similar products, it creates a perceived value amongst consumers and potential customers.
- A product differentiation strategy also allows for non-price competition when a candy business, for example, differentiates its candy from other brands in terms of taste.
- The same strategy that gains market share through perceived quality or cost savings can create loyalty from consumers, which implies that the company must continue to deliver quality or value to consumers to maintain their loyalty.



- A product differentiation strategy that focuses on the quality and design of the product can create the perception that no substitute is available on the market. Although competitors may have a similar product, the strategy focuses on the quality or design differences other products do not have. An advantage is gained as customers view the product as unique.

Apple also uses product differentiation and attempts to increase the demand for its products through differentiation, which entails making its products unique and attractive to consumers. By focusing on customers willing to pay more and maintaining a premium price at the cost of unit volume, Apple has set up an artificial entry barrier to competitors (Nair 2014:1).

For service-oriented businesses, a focus on quality differentiation is the key to success (Kokemuller 2014:1) with the emphasis on a variety of service components:

- Service performance can lead to differentiation by delivering a consistently high-quality service to customers.
- Service experience allows for differentiation in providing an ease of use and valuable services to customers such as after-sales and/or after-hours services.
- Service resolution is critical for success in service-quality differentiation. This involves carrying out the steps necessary to resolve customer problems or fix product or service errors and follow-up to ensure the customer's satisfaction with the outcome.

Service quality differentiation is more challenging than product differentiation, primarily because services are performed by people. Whether proactively delivering services or responding to customer complaints, it requires consistent performance from employees to make service differentiation work (Kokemuller 2014:1-2). According to Gebauer, Gustafsson and Witell (2011:1270), manufacturing companies are starting to redirect their efforts towards customer centricity and innovativeness, but also from goods to services, which implies that instead of services being add-ons to the product, they become the centre of the total offering.

According to Hassan, Ramachandran and Kamaluddin (2013:12), a company's workforce represents its intellectual capital – the brainpower and creative energy, which provides the company with personnel differentiation possibilities when utilised appropriately. In this respect, well-trained people who exhibit six characteristics, namely competence, courtesy, credibility, reliability, responsiveness and communication have allowed companies such as Singapore Airlines to gain popularity for its superior flight attendants and McDonalds for their courteous staff (Smt Z.S. Patel College of Management and Technology 2014:2).

Image differentiation is used to create a brand image, which is often considered to be an organisation's personality and can include personality characteristics such as youthfulness and dynamism and are built with strong visual and physical characteristics, such as attire (Albers-Miller 2014:1). A company can differentiate itself by creating a unique customer experience such as superior customer service and, in turn, brand the experience (Razak, Ilias & Rahman 2009:42). Quality, reliability, convenience and prestige are therefore important attributes that each company's image is based on in order to attract customers (Trivellas, Reklitis & Konstantopoulos 2007:1075). Toyota has been very successful in differentiating on the basis of superior design and quality, which has led to Toyota being able to create a brand image that is very strong and one that brings to mind quality and long-lasting cars when a potential customer sees it (Western Oregon University 2014:1). Corporate identity is thus a key differentiating factor of strategic importance and can include the formation of strategic alliances (He & Balmer 2013:402). Strategic alliances are used to take full advantage of the economies of scale that internationalisation offers (Rajasekar & Fouts 2009:93) such as the Hewlett Packard-Cisco alliance (Keasler & Denning 2009:21).

In terms of the above mentioned, it has been established that generic differentiation strategy is about the creation of a unique product or service for which customers are willing to pay a price premium that exceeds the additional cost of the differentiation, based on the innovativeness and quality of the product or service. It is also about creating loyalty from customers based on their perception of the product or service being superior to those of competitors. Generic differentiation strategy has been

developed further into more specific strategies, such as differentiation by product, service, personnel, and image, which provide various options to differentiate in terms of each of these specific strategies. All these strategies seem to provide various options to utilise when developing a strategy for the purpose of this study, as it can be argued that a strategy to optimise the contribution of Work-Integrated Learning towards the employability of students of CUT contains definite elements of both a product (the skills and competencies that students ought to possess to make them more employable) and a service (that which CUT needs to provide to students and employers as the primary customers of WIL) that can be used to differentiate CUT from its competitors.

Having analysed what others have had to say about strategy it is now required to narrow down the focus to Porter's view of strategy, being recognised as the well-established and foremost opinion in this regard as revealed through the literature studied and quoted above.

### **3.2.4 Porter's strategy**

It has been noted above that Porter's strategy involves three types of competitive strategy, namely

- the cost leadership strategy (when organisations compete for the largest number of customers through price when goods or services are standardised),
- a focus strategy (when the aim is to serve a limited group of customers better than your competitors who are serving a broader range of customers); and
- differentiation strategy (when a product or service is to be provided with distinctive qualities that are valued by customers to set one apart from the competition), with the latter selected as the most appropriate for this study.

It is important to choose only one strategy (Ankli 1992:231; Yoo, Lemak & Choi 2006:354-355; Parnell 2006:1141), since a firm should not attempt to both differentiate and be a low cost leader, as this presents the danger that a firm maybe caught in the middle and loses to those firms that do specialise. The concept of a value chain

(inbound logistics, operations, outbound logistics, marketing and sales) is also presented by Porter, together with support activities such as infrastructure, human resource management, technology development and procurement and is it possible for a firm to develop a competitive advantage in each (Ankli 1992:231; Hsieh & Chen 2011:14-18). The firm's value chain also links to the value chains of upstream suppliers and downstream buyers, resulting in a larger stream of activities known as the value system and is competitive advantage not only dependent on the firm-specific value chain, but also on the value system of which the firm is a part (*The World Press* 2009:2-5). A sustained competitive advantage is therefore not only about strategic choice but also about the implementation of organisational structures and systems that facilitate the achievement of their strategic choices (Porter, 1980 in Spencer *et al.* 2009:84).

In discussing what strategy is, Porter presents the following views (as summarised below) in his article published in the *Harvard Business Review* of 1996 (Porter 1996:61-78) in distinguishing between operational efficiency and strategy.

Although operational effectiveness is necessary, it is not sufficient on its own. It should also not be confused with strategy, as they both work in very different ways. The reason (apart from working in different ways) is that a company needs to establish a difference that it can preserve for it to be able to outperform competitors. Operational effectiveness is about performing similar activities than competitors, but better. Strategy, on the other hand, implies performing different activities from competitors or performing similar activities in different ways. According to Porter (1996:64), strategy rests on unique activities. He asserts, “Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value.” The essence of strategy therefore is a choice to perform different activities or activities differently than what rivals do. Strategy is thus about the creation of a unique and valuable position involving a different set of activities that corresponds with the views presented above.

Strategic positions emerge from three sources that are not mutually exclusive and often overlap. It is economically feasible only when a company can best produce particular

products or services using distinctive sets of activities. Variety-based positioning stems from the production of a subset of an industry's products or services. This positioning is based on the choice of product or service varieties rather than customer segments. Panel beaters, for example, will focus on repairing damage to vehicles, but do not provide for servicing of vehicles or selling tyres. Only a subset of customers' needs is met. Another source is needs-based positioning where most or all the needs of a particular group of customers are served. It is based on targeting a segment of customers. It arises when there are a group of customers with differing needs and when a tailored set of activities can serve those needs best. An example would be Wetherly's serving the house furnishing needs of a more affluent group of customers. The third source is access-based positioning. It is about segmenting customers who are accessible in different ways. Urban versus rural-based customers, for example, is used by Hilton Hotels to cater for corporate and leisure travellers in the large cities of the world. Whatever the basis (variety, needs, access, or some combination of the three), positioning requires a tailored set of activities because it is always a function of differences in activities (or differences on the supply side). Positioning is not always a function of difference on the demand (or customer) side, for instance, variety and access positions do not rely on any customer differences but are in practice often accompanied by needs differences (for example, the types of rooms and facilities required in hotels by families versus corporate guests).

The first component to the answer what strategy is, is thus the creation of a unique and valuable position that involves a different set of activities.

A sustainable strategic position also requires trade-offs. A sustainable advantage cannot be guaranteed by simply choosing a unique position as competitors will copy or imitate such a valuable position in one of the following two ways:

- A competitor can choose to reposition itself to match the superior performer. Fruit & Veg, for example, has started to stock superior meat and groceries to match the food section of Woolworths.

- A competitor can seek to match the benefits of a successful position while maintaining its existing position through straddling. In this manner, an attempt is made to match the benefits of a successful position whilst maintaining its existing position by adding new features, services or technologies to the activities it already performs. An example is in the airline industry where a full-service airline can decide to match a different low-cost airline.

In order for a strategic position to be sustainable there must be trade-offs with other positions and occur when activities are incompatible. According to Porter (1996:68), "A trade-off means that more of one thing necessitates less of another" and arises for three reasons:

- A company known for delivering one kind of value may lack credibility and confuse customers or undermine its own reputation by delivering another kind of value or attempting to deliver two inconsistent things at the same time.
- Trade-offs can arise from activities themselves. Different positions (with tailored activities) require different product configurations, different equipment, different skills, etc. In general, value is destroyed if an activity is over or under designed.
- Trade-offs also arise from limits on internal coordination and control. By choosing to compete in one way and not the other, management is making its organisational priorities clear. By contrast, companies that try to be all things to all customers often risk confusion amongst its employees who then attempt to make day-to-day operating decisions without a clear framework.

Trade-offs add a new dimension in answering the question what strategy is, as strategy is also about making trade-offs in competing and therefore choosing what not to do. It will therefore be important to focus on a configuration of WIL informed by the established definition for this study and that is a tripartite curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace.

Positioning choices not only determine which activities a company will perform and how it will configure individual activities, but also how activities relate to one another. It is thus about a fit that drives both competitive advantage and sustainability. While operational effectiveness focuses on individual activities or functions, strategy concentrates on combining activities. “Fit locks out imitators by creating a chain that is as strong as its strongest link”, according to Porter (1996:70). Fit is a central component of competitive advantage, because it involves a whole system of activities with its competitive advantage stemming from the way activities fit and reinforce one another.

Fit among activities can be generic and apply to many companies, but the most valuable fit is strategy specific, since it enhances a position’s uniqueness and amplifies trade-offs. There are three types of fit, which are not mutually exclusive:

- First-order fit implies simple consistency between each activity (function) and the overall strategy. Consistency produces an accumulation of the competitive advantages of all activities that does not erode or cancel itself out. It is therefore easier to communicate the strategy to all stakeholders and improves implementation through single-mindedness in the company.
- Second-order fit occurs when activities are reinforcing, for example, a specific type of towel used in hotels leads to a demand thereof in the shops selling this type of towel.
- Third-order fit goes beyond activity reinforcement and is referred to as the optimisation of effort. Strategically placed warehouses enable the effective restocking of inventory and therefore reduce the need to carry large in-store inventories. It is about the coordination and exchange of information across activities to eliminate redundancy and minimise wasted effort.

Competitive advantage is achieved from the entire system of activities. The whole thus matters more than any individual part in terms of all three types of fit. Such a fit should therefore reduce cost or increase differentiation.

The conclusion can therefore be made that the most viable positions are those built on activity systems that are incompatible because of trade-offs. The trade-off rules are set by strategic positioning that defines how individual activities will be configured and integrated. When strategy is viewed in terms of activity systems, it becomes clearer why organisational structure, systems and processes need to be strategy specific. It therefore makes sense that strategic positions should also have a horizon of a decade or more and not of a single planning cycle. As continuity promotes improvements in individual activities and the fit across activities, it allows an organisation to build unique capabilities and skills custom-fitted to its strategy.

Porter (1996:78) also states that

Strategic continuity does not imply a static view of competition. A company must continually improve its operational effectiveness and actively try to shift the productivity frontier; at the same time, there needs to be ongoing effort to extend its uniqueness while strengthening the fit among its activities.

However, a company may have to change its strategic position due to a major structural change in the relevant industry. The choice of a new position depends on its ability to find new trade-offs and leverage a new system of complementary activities into a sustainable advantage.

In answering the question what strategy is according to Porter, it can now be concluded from the discussion above that it was determined that:

- the first component is the creation of a unique and valuable position that involves a different set of activities;
- trade-offs add a new dimension as strategy is also about making trade-offs in competing and therefore choosing what not to do; and
- it is about creating fit among a company's activities.



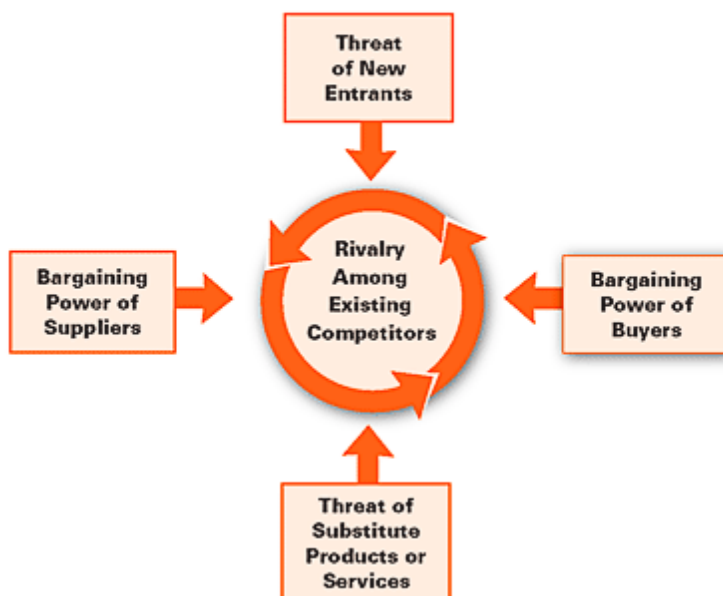
In making the connection with generic strategies as described in his publication on competitive strategy in 1985 (*Competitive Strategy: Techniques for Analyzing Industries and Competitors*), Porter (1996:67) states,

In *Competitive Strategy* (*The Free Press*, 1985), I introduced the concept of generic strategies – cost leadership, differentiation and focus – to represent the alternative strategic positions in an industry. The generic strategies remain useful to characterize strategic positions at the simplest and broadest level. The generic strategies framework introduced the need to choose in order to avoid becoming caught between what I then described as the inherent contradictions of different strategies. Trade-offs between the activities of incompatible positions explains those contradictions.

Porter also refers to five competitive forces that shape strategy as depicted in Diagram 1 below.

*Diagram 3.1: Porter's five forces (2006:2)*

### The Five Forces That Shape Industry Competition



Porter (2006:2) states that it is important to understand the competitive forces together with their underlying causes as it reveals the roots of an industry's current profitability

while providing a framework for anticipating and influencing competition (and profitability) over time. This is required as defending against the competitive forces and shaping them in a company's favour are crucial to strategy. The "Five Forces" diagram captures the main idea of Porter's theory of competitive advantage and defines the rules of competition in any industry (Stanford University 2014:2; Ou & Chai 2007:478). The use of strategy, and specifically the strategy of Porter, together with the differentiation strategy selected for the purpose of this study, now needs to be investigated for the applicability thereof in the higher education context.

### **3.2.5 Application of strategy in the higher education context**

The application of strategy does not seem to be a strange phenomenon in the higher education context, as revealed by the literature studied. Evidence exists of the application of strategy from a macro-level (continental and national) to a micro-level with regard to individual institutions and departments or centres within higher education institutions.

From a macro-perspective, the Bologna Declaration of 1999 sets out "the objective of increasing the international competitiveness of the European system of higher education" and points out the need "to ensure that the European higher education system acquires a world-wide degree of attraction" (Bologna Process 2007:1). Flowing from this declaration was the formulation of a strategy referred to as the External Dimension of the Bologna Process, which takes competitiveness and cooperation as well as the identification of five core policy areas into account. These policy areas are:

- Improving information on the European Higher Education Area (EHEA);
- Promoting European Higher Education to enhance its world-wide attractiveness and competitiveness;
- Strengthening Cooperation based on Partnership;
- Intensifying policy dialogue;
- Furthering recognition of qualifications (Bologna Process 2007:2).

In the United States of America, a strategy called “In Pursuit of Prestige: Strategy and Competition in U.S. Higher Education” focused on strategy and competition as it relates to student enrolments, research funding, public fiscal support and private financial contributions (Brewer, Gates & Goldman 2001:1-10). Similarly, in the United Kingdom (UK), the Joint University Council developed a strategy designed to promote a step change in the quality and quantity of social work research activity at UK higher education institutions (HEIs). This was done to maximise the HEI contribution to social work and social-care service improvement, develop a strong evidence base for social work and social-care services and build a workforce capable of using evidence critically and effectively (The Joint University Council 2006:1). The Higher Education Academy also produced a strategy for higher education in the UK, but aimed at improving the student learning experience by raising the status of teaching, adding to the body of knowledge relating to pedagogy, enhancing professional teaching practice and facilitating networks and communities of practice (The Higher Education Academy 2011:2).

A national strategy was developed by the Office for Fair Access (OFFA) and the Higher Education Funding Council for England (HEFCE) to ensure that all those with the potential to benefit from higher education have equal opportunity to participate and succeed. The strategy focuses on access, retention and student success as well as progression to or within employment or further study (Higher Education Funding Council for England 2014:1, 4). Ireland’s National Strategy for Higher Education to 2030 is aimed at innovative approaches to research-led teaching and learning, programme design, student assessment and quality assurance with a strong international presence to impact on regional, national and global needs (The Strategy Group 2011:10). A study commissioned by the British Council Scotland enabled Kemp and Lawton (2013:4) to establish an accessible evidence base of national-level assets to promote the existing and potential contributions of Scottish universities in respect of a collaborative sector, quality assurance and credit-recognition procedures, graduate employability and employment, innovative structures and pedagogy as well as research impact. The Department for Employment and Learning (2012:3-5) developed a Higher Education

Strategy for Northern Ireland, which sets out the direction for higher education policy in Northern Ireland for the period to 2020 in terms of the following key issues identified:

- Responsiveness to the needs of the economy, with an emphasis on meeting the skills needs of industry; maximising the potential of research and development (R&D); and promoting knowledge transfer.
- Delivering a learning experience of the highest quality supported by a fit-for-purpose quality assurance framework; provide opportunities for students to improve their employability skills, and maintain a supportive learning environment.
- Higher education must be accessible to all who have the ability to benefit.
- Flexibility in delivery and funding, implying that lifelong learning must be at the heart of the system and new routes into, and through, higher education must be developed.

The Norwegian Ministry of Education and Research (2011:3) identified the following priorities in a strategy for higher education cooperation with North America for the period 2012-2015:

- Collaboration at government level and network arenas;
- Institutional partnerships and stronger correlation between higher education and research collaboration; and
- Mobility of students and staff.

There are thus many examples of strategy on a macro level. Interesting to note within the context of this study is the following:

- The element of competitiveness in the Bologna Declaration, the External Dimension of the Bologna Process, competition in the U.S. strategy as well as the notion of workforce development in the UK; and

- The importance of employability of students as reflected in the strategies of England, Scotland and Northern Ireland.

Whereas competition and the employability of students seem to be the most commonly targeted areas of strategy on a macro-level, it is now necessary to look at strategy on a micro-level.

Competition in higher education amongst most colleges and universities in highly regulated markets is quite tame due to the demand being high, with relatively strong government funding (although it is generally declining) and suggests the use of Michael Porter's strategy model to analyse the nature of competition in higher education (Hampson 2010:3). Usher (2011:1) furthers the argument by stating that there is a basic problem with trying to get universities to compete with one another, as most of them are structurally incapable of following any coherent competitive strategy at all. According to him (Usher 2011:1), Michael Porter's three generic types of competitive strategies need to be tested in this regard. Those competing on a broad scale could compete on cost (e.g., Walmart), or they could compete on product differentiation, which allows them to charge a premium (e.g., Apple, Mercedes-Benz), while the third option is to limit oneself to a particular niche and compete in a very small market (e.g. Porter Airlines, which only tries to serve a few destinations). Universities have a tough time restricting themselves to niches, as breadth is one of the things that distinguish universities as an institutional type. Competing on cost is also very difficult to do because low-cost (and hence low-margin) strategies tend to work through expanding production and becoming a high-volume producer which with exorbitant physical infrastructure costs make this an unviable strategy for all physically based universities (though distance and e-learning providers can obviously make it work). That leaves product differentiation as the only viable strategy with Waterloo's co-op model being a good example (Usher 2011:2).

The University of Waterloo's Sixth Decade Plan proclaims cooperative education as one of the six foundational pillars of the university and thus clearly connecting the importance of cooperative education to the identity of the University. The university's co-op programme stands as the world's largest post-secondary institution cooperative

education programme with 16 500 annual work terms and more than 4 500 hiring organisations (University of Waterloo 2011:1). Similarly, the University of Cincinnati also uses cooperative education as a strategy in terms of identity and branding, as stated by Cedercreutz and Cates (2010:21),

The core secret of success for co-op at the University of Cincinnati is explicitly value based. Co-op gave the university a competitive advantage, positive identity, and an enhanced goodwill within the community. Through its initial success, co-op developed to become an intrinsic part of the culture of the institution. Experiential learning forms a core academic value, and the learning benefits offered by co-op are well understood on every level.

Cedercreutz and Cates (2010:23) also indicate the following impact:

the effect of the program on the competitiveness of the institution should not be underestimated. UC students, over their 5 200 annual co-op terms, earn an aggregate of \$37 million, which significantly enhances the competitiveness of the institution.

These are good examples of how WIL was used as a differentiation strategy to enhance the competitive position of these universities and establish a unique identity.

These examples also correspond with the views of Spencer *et al.* (2009:85) as well as Baykal and Delagarde (2011:8), who have found that generic differentiation strategy has been developed further into strategies that are more specific such as differentiation by product and service as well as image in responding to the complexity of the business environment. Image or branding thus seems to be a current issue in higher education in terms of strategy.

According to Morrison (2013:3), there is a growing interest and belief in the importance of defining and articulating one's university brand through differentiation, in the same vein as a product in the consumer space. The rationale is to be found in the effect of globalism on competition with a much larger world to brand one's university to in order to attract the best and brightest students as well as donor funding. An example would

also be private or alternative education providers on the internet and the increase in the acceptance of the legitimacy of non-university learning providers (Hampson 2014b:1). The days when colleges and universities could use their formidable reputations to reach into the non-credit market unchallenged are over as the economics of the internet makes it easier than ever for small companies to compete with the once-dominant footprint of higher education institutions (Hampson 2014a:2). Hence, elite institutions like Harvard face very different circumstances, according to *The Economist* (2014:1) since they operate like venture capital firms by offering subsidised, labour-intensive education to highly qualified students. The aim for them is to cultivate a sense of belonging and gratitude in students in order to recoup their investment decades later in the form of donations from successful alumni. The best way for them to see off competition may simply be to preserve their exclusivity (*The Economist* 2014:2). Universities can therefore move into new directions but should be cognisant that it is about making tough choices, namely one direction rather than another direction, which involves strategy that is context specific (Hampson 2012:2). What is to be deduced from all these strategies and realities in higher education, though?

The reality seems to be what many authors have predicted and that is that the era of relatively high fees and globalisation will encourage new providers to enter the higher education market with far-reaching consequences comparable with the red oceans described by Kim and Mauborgne (Purcell 2011:1). Universities must therefore start to adopt more sophisticated strategies, including greater pricing differentiation, international growth, regionalisation, improved employer partnerships, greater student employability, and targeting particular student segments, for example, adult learners to mitigate risk and seize opportunities to position themselves (Purcell 2011:2). An attempt should thus be made to move towards blue oceans through differentiation to create distinctiveness and unique market spaces, which bodes well for reputational growth and sustainability (Purcell 2011:4).

### **3.2.6 Conclusion**

In conclusion it can be stated that strategy can be defined as an understanding of where one is, a clear sense of where one wants to end up, an assessment of what stands in between, a decision about how to approach the challenge and a detailed course of action to undertake (Arauz 2014:2). Having investigated the options available, namely general, corporate and competitive strategy, competitive strategy was selected as the approach to follow, being more appropriate for the purpose of this study. In terms of competitive strategy, differentiation strategy was selected, as it provides for options to develop students in such a way through WIL that they possess distinctive qualities that are valued by CUT customers that will set CUT apart from its competition. Students thus need to be equipped with the skills and competencies that make them more employable, together with a service that CUT needs to provide to students and employers that can be used to differentiate CUT from its competitors. The intention should therefore be to move towards blue oceans through differentiation in order to create distinctiveness and uniqueness for CUT and its students through WIL. It is thus necessary to review successful applications of WIL in the chapter to follow.



## CHAPTER 4

# A REVIEW OF THE APPLICATION OF WORK INTEGRATED LEARNING IN HIGHER EDUCATION: AN INTERNATIONAL PERSPECTIVE

### 4.1 INTRODUCTION

In reviewing the application of WIL in higher education, it will firstly be required to take cognisance of the issues that need to be considered regarding the application of WIL in higher education. This will form the framework against which examples of various universities' applications of WIL can be measured. In this manner, best-practice principles and innovative approaches can be identified to consider for inclusion in the strategy to be developed to optimise the contribution of WIL towards the employability of students.

### 4.2 A FRAMEWORK FOR THE APPLICATION OF WIL

Universities are continually exploring new ways to foster graduates who possess a broad range of personal, social and professional capabilities evident in the spread of WIL practices that are gaining greater presence and propulsion within the higher education landscape. This represents the evolution of WIL from its modest beginnings to the status of a new enterprise in higher education (Swirski & Simpson 2012:239). The need to develop work-ready graduates who can transfer the knowledge and skills from the classroom is thus a key issue in higher education with a growing interest in WIL and its potential impact on student development (Freudenberg *et al.* 2010:42). Universities are therefore offering their undergraduate students the opportunity to gain business acumen and real-world experience by undertaking WIL as part of their learning, according to Leong and Kavanagh (2013:1). The aim is to have graduates coming to the workplace who are ready to 'hit the ground running' (Richardson *et al.* 2013:28) in order to close the gap between employer expectations of the skills graduates should possess on entry to the workforce and the skills that graduates do possess (Leong & Kavanagh 2013:2). Employability therefore remains a key issue with regard to WIL.

Employability also has consequent outcomes for university reputations, retention rates and course demand (Orrell 2004:1), since WIL provides universities with an opportunity to offer a better product, which students will view as a return on their investment (Abeysekera 2006:7, Sutherland & Symons 2013:295). McEwen and Trede (2014:56) support this view by indicating that research also shows that gradual and integrated programmes are best suited to retaining first-year students. This is because WIL is too often implemented later in the course; too late perhaps to retain those first-year students who discontinued their course because of an initial lack of grounding in a real workplace setting. Higher education institutions also benefit from WIL through enhanced links with industry, resulting in greater opportunities for funding and thereby attracting higher quality students via an increased edge in the market (Papakonstantinou *et al.* 2013:59). An opportunity is presented to universities to gain an advantage and create a demand through a major revamp of WIL by expanding WIL offerings embedded within its courses (Jackling *et al.* 2013:75). Students pursue WIL to improve their employment prospects on graduation in a competitive labour market (Cameron 2013:135), although Jackson (2013:99) cautions that placements do not consistently result in enhanced skill outcomes. What could such a revamp of WIL then entail and what should be considered in this regard?

The explicit aim of a national WIL scoping project in Australia was to identify issues and map a broad and growing picture of WIL as well as to identify ways of improving the student learning experience in relation to WIL (Patrick *et al.* 2008:v). Four broad challenges were identified in relation to the implementation and application of WIL (Patrick *et al.* 2008:37-44), as summarised below:

- Implementation of appropriate policies and approaches

Although universities are increasingly looking to WIL as a way to achieve strategic goals and improve student learning, most grapple with complex curriculum and administrative issues of programme implementation. Most universities are quick to recognise the benefits of WIL, but are challenged by the need to develop an institutional commitment to WIL that is supported by coordinated policies and approaches. As WIL expands, it is

necessary for universities to increase their capacity to provide access to WIL opportunities underpinned by policies and approaches that support this growth.

- A cultural shift towards the development of partnerships and a stakeholder approach

A stakeholder-integrated approach is required for the planning and implementation of WIL. It must be based on formalised relationships and a common understanding of the associated responsibilities and level of commitment required. Such an approach requires clear agreements and the recognition of needs, as well as mutual benefit and costs. Increased engagements are likely to lead to a better understanding of issues by all stakeholders to create linkages that are more meaningful and help produce the adaptive, adaptable and transformative employees of the future.

- The development of WIL curriculum and pedagogy

Principles of good practice in the design and management of WIL programmes emphasise the importance of curriculum design that incorporates work-integrated activity into the curriculum, accommodates the diversity of learning, includes the learning and teaching of both specific and generic skills, and recognises generic and career skill development. If the WIL curriculum is to achieve its desired educational outcomes and build a bridge of learning between the university and the workplace, the sector has to extend its current range of WIL approaches and assessment strategies. The implication is the incorporation of new models that are purposefully designed and constructively aligned to mainstream university curricula and employer needs. Increased communication and feedback amongst universities, students and employers about curriculum issues are necessary to enhance curriculum design and establish mechanisms for continuous quality improvement for future initiatives.

Assessment is integral to effective curriculum design. Assessment methods that can be used include reflective journals, portfolios/ePortfolios, workplace mentor/supervisor reports and workplace projects aimed at providing value to employers as well as students. The following should be taken into consideration in respect of assessment

methods in WIL: maintenance of academic standards; relevance and consistency of assessment processes; responsibility for assessment; what should be assessed when a student is on work placement; and as processes by which this assessment is supported and managed.

- Adequate resourcing

The expectation is that university policy and approaches recognise coordination and supervision of WIL as a legitimate academic endeavour that is recognised and valued. Solutions to resourcing issues can be found in improving staff capacity, building functional support mechanisms, enhancing networks and a commitment to flexibility and support for students. WIL has to be seen as an integral part of teaching and learning, as well as appropriately resourced community engagement.

Building on the importance of employer involvement, Sattler & Peters (2012:9) assert that a key challenge in the coming years will be to ensure that the supply of WIL opportunities offered by employers is able to meet the demand from students, faculties and institutions while simultaneously providing high-quality learning experiences for students. To be able to meet this demand it will be necessary for universities to engage both current WIL employers and those who have never provided, WIL as well as academic faculties and students themselves. According to Sattler and Peters (2012:8), the following strategies could be considered by universities to increase employer involvement in WIL:

- Providing more information about the full range of WIL options available, the specific skill sets brought by students within individual WIL programmes and the criteria for what is regarded as suitable work.
- Adopting standardised terminology for WIL programmes to assist employers in knowing what is involved when they are asked to participate in specific types of WIL.
- Increased flexibility towards WIL employers to adjust the length and timing of WIL opportunities to align WIL programmes better with business cycle needs.

Jackson (2013:99) supports this view by indicating that WIL comes in many forms and represents a flexible creature that can be adapted to different disciplines and organisational contexts.

- Simplifying processes for employers to recruit and select WIL students, assistance with administrative requirements and more training and support for employers in respect of student supervision and assessment.
- Ensuring regular and open communication between universities and WIL employers during and after the placement.

Furthering the emphasis on the role of employers, Choy & Delahaye (2009:3) state that the benefits of WIL can only be realised if the curriculum, learning tasks and facilitation approaches are embedded and embodied in the cultural context of the workplace. Only then can learning be made more meaningful for individuals and their organisations, as concurred by Nortcliffe (2012:1). Rose (2013:92) has determined that well-resourced employers such as Google and Microsoft offer the most desirable internships. Usher (2012b:18) therefore states that rather than focus on the question: How can education become more attuned to the concerns of employers and the workplace, the enquiry should focus on the counter-questions: How can workplaces be(come) places of productive learning for students? That is, how can workplaces assist to produce graduates with learning attributes that are attuned and responsive to a flexible world of change, complexity and contingency that is more liquid? Such an inclusive approach involving all stakeholders is also proposed by the African Development Bank Group (2008:v-vi) and Nduna (2007:76).

The changing world of work therefore provides new opportunities for student placement. The Ontario Ministry of Education (2000:9) refers to the impact of innovations in information technology and the use of the Internet that allows for virtual work placements. As an example, they cite a student enrolled in a Grade 11 English course that could participate in a virtual work experience, which links him or her with a story editor, a reporter, or a copywriter at a local, regional, or national newspaper. If the technology is available and accessible, virtual work experience can give students –

including students who are receiving special education programmes and services and students in rural areas or remote communities – the opportunity to participate in a greater variety of experiences than have ever been available to them in the past. Simulation of the work environment is a further option that enables students to experience some aspects of the workplace within an educational framework according to Patrick *et al.* (2008:16). What more can then be discussed with regards to the role of students?

There is an increasing focus on the student as the nexus of integrating classroom and workplace learning according to Trede (2012:160) since, in the university context, students are learners and in the workplace context, they are pre-accredited professionals, which imply that in both contexts students can be facilitators of peer learning. Student preparation for WIL thus becomes a critical issue and should include the following, as determined by Martin *et al.* (2012:34):

- Prerequisite academic coursework and theoretical knowledge;
- General WIL and career preparation (CV & interview skills) and readiness for the WIL placement;
- The availability of an academic supervisor/mentor and a work-place supervisor for on-going support and guidance to the student.

Orrell (2011:2-3) adds opportunities for brief workplace observations for students or to test themselves undertaking complex routines and skills in controlled conditions. Students also need clear expectations of what universities and employers expect of them. He concludes that students learn best when there is a strong element of challenge in their placement, being assigned significant work-related responsibilities, together with reflection and debriefing on learning in practice that is well supported by the university. Ferns and Moore (2012:219) also conclude that practice-based experiences that incorporate WIL must be supported by the necessary preparation, engagement and reflection. The emphasis on students is aptly summarised by Forbes (2008:12) by means of a proposed quality cycle for WIL, which includes:

- Preparation of students and employers by the university;
- The placement process;
- Visitation and monitoring by the university in the workplace;
- Mentoring and assessment by employers;
- Assessment and debriefing by the university.

Ferns & Moore (2012:209) provide more details in terms of the WIL quality cycle and postulate that the assessment of students' performance requires observation of actual work as it takes place in the workplace, whereas a record of attendance is an administrative task. They include three broad elements with regard to assessment, namely actual workplace performance, a record of the experience (diary or journal) and a reflection on the work-based experience. Lester & Costley (2009:3) further emphasise the importance of reflection by asserting that one of the distinctive features of WIL is its emphasis on reflecting on and enquiring into work activity as well as developing people as reflective, self-managing practitioners who are committed to their own development. This view is supported by the finding of Ntshoe *et al.* (2011:40) that the critical reflection and integration processes differentiate WIL from normal work-experience programmes.

In summarising the above, it seems that the key issues to consider in establishing a framework against which the application of WIL at universities can be measured against are the following:

- An institutional commitment to WIL supported by adequate resources and appropriate policy and approaches that recognise WIL as a legitimate and valued academic endeavour.
- Establishing and maintaining strong partnerships with employers, which require regular and open communication between all stakeholders throughout the WIL process.
- The changing world of work together with advances in technology also creates new opportunities for WIL such as virtual placements.

- Students are regarded as the nexus between the classroom and the workplace, which makes the comprehensive preparation of students for WIL a critical issue.
- Expectations and responsibilities must be determined very clearly between the university, students and employers in terms of how WIL is presented in respect of the quality cycle for WIL.
- WIL is a curriculum issue of which critical reflection and integration processes differentiate WIL from normal work-experience programmes.

It needs to be noted that the framework established above also corresponds well with the adopted definition of WIL for this study, namely that WIL is defined as a tripartite curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace. Examples of various universities' applications of WIL now need to be considered.

#### **4.3 THE APPLICATION OF WIL AT HIGHER EDUCATION INSTITUTIONS**

The literature studied revealed that there are various applications of WIL at higher education institutions. The applications of WIL are presented per university and research projects conducted in this regard. Best-practice principles and innovative approaches will be identified against the framework established above for possible inclusion in the strategy to be developed to optimise the contribution of WIL towards the employability of students.

Pegg *et al.* (2012:35) indicate that the Dearing Report of 1997 recommends that every student in the United Kingdom should be given the opportunity to undertake a placement, but despite this, by 2007, only 29% of UK students were undertaking a work placement, compared with the European average of 55%, France at 72% and Germany at 80%. They cite the following examples of innovative WIL approaches at the University of Leeds, the Open University, Sheffield Hallam University and Plymouth University (Pegg *et al.* 2012:36-41):



Students on the Fashion Studies degree at the University of Leeds can undertake elective industrial placements during the second year of the programme. The level of student engagement within the process of identifying, procuring and managing the placement was determined not to be good enough though. Technology (such as the learning management system of the university and e-mail) was introduced in securing, monitoring and assessing placements as well as in reflective elements of the module. This has led to innovative approaches within the curriculum and developed the nature of the contributions and engagement of both students and employers. A strong reflective element was therefore introduced, as students are required to review their experiences to enhance successful progression and development through their final year of study. It was found that access to reflective diaries and overall placement feedback provides an enlightening view of student experiences in the workplace. These demonstrate how students develop an understanding of industry structure, globalisation, commercial practices, time management, personal strengths and weaknesses, career goals and self-awareness. The accelerated learning that often occurs during the placement does therefore not end upon the return to university, as there is a clear and associated continuation of this positive, experiential learning into the final year of study, where students use their commercial experiences to inform their creative, working practice and enhanced professional attitudes during their final year. There has been a notable difference between those who have taken a placement and those who have not in relation to maturity and confidence in approaches to study, and in areas such as time keeping, motivation, volume of work produced and engagement with the academic staff. This has manifested itself in several ways, namely a marked improvement in the grade profile, students were more proactively engaged with their learning environment and they were frequently more proactive in seeking employment prior to completing their degrees (though many are actually offered graduate-level employment with the original placement provider).

The Open University (Pegg *et al.* 2012:36-41) provides for an application of WIL that is applicable to part-time learning students where it is often found that there is a tension between commitment to study and commitment to their workplace. The Career Development and Employability module explicitly asks the students to situate their

learning within their workplace and view it as a learning space that provides the physical and psychological environment in which to develop skills and understanding. These students are active in the workplace and thus able to reflect on their role and its impact within the organisation on a day-to-day basis. In addition, students are encouraged to discuss issues with one another in order to benefit from reflections related to a variety of different workplaces. They must identify similarities and differences between roles in varying sectors, industries and at different organisational levels. The diversity of the student group provides both opportunities and challenges where student communication skills are also tested through the requirement to explain their particular situation and role. Students keep working and thinking throughout the module, which is a way of getting them to engage with the learning opportunity to help them get the most from the learning process. During this process, they have to reflect on gaps in their knowledge and skills, which provides an opportunity to think about what they need to know and how they can go about acquiring new skills and knowledge. Contextualising knowledge and skills is therefore important.

The Sheffield Hallam University's Venture Matrix scheme (VM) is an innovative learning and teaching enterprise environment, which enables students to develop their employability and enterprise skills while also enhancing their entrepreneurial capabilities (Pegg *et al.* 2012:36-41). The VM extends the concept of enterprise education beyond the familiar tools of ghost companies and virtual business simulations by enabling students to form their own businesses, social enterprises and other ventures as well as to trade with each other in person in a safe environment. Within the VM students are afforded the opportunity to tackle real-life challenges while gaining new skills for their future employment. They are able to set up their own venture or social enterprise and trade with one another across disciplines and study levels thereby simulating the real world. The VM is a unique scheme that is open to students and university staff, but to organisations and businesses in the local region as well. Businesses can get involved and have access to students to work on real-life projects, often with tangible results. The VM also provides hands-on employability skills experience and development. This is further supported by a process whereby staff, along with business/organisation partners, helps students to reflect on their experience and to conceptualise it. This aids

the students in articulating their experiences when they have placement/graduate job interviews. During the 2010-11 academic years, it was reported that over 1 100 students have formed Venture groups and undertook some 60 projects with local businesses/organisations. These projects included planning and running a fundraising fashion show for the local hospice, producing and broadcasting a live radio show with BBC Radio Sheffield and working with a well-established local small to medium enterprise (SME) to design an animated viral advert. Groups have also traded with one another creating symbiotic learning by providing, for example, an information-technology service desk to nursing students. The nursing students gained IT skills while the IT students were given feedback on their communication skills.

Students entering stage three (3) of the programme in Design at Plymouth University's School of Art and Media begin with an enterprise module that runs parallel to and informs practical and theoretical dimensions of the course. The aim is to equip students to operate confidently as professionals within their chosen area of art and design activity. By establishing their own strengths and weaknesses and plotting them against their ambitions and objectively working in teams within role-play situations, students establish objectives for their final year. They make contact with their competition in the workplace (other successful professionals) as well as potential employers to gather information that will inform their exit into the precarious field of freelance practice. All final-year students must demonstrate that they are able to work within the arena they have identified. Opportunities for work experience are increasingly competitive and limited to students studying in the illustration field. Therefore, they have to create their own exhibitions, approach potential clients, enter competitions, make websites and other promotional materials, and prepare a professional-level portfolio to alert clients and potential employers to their presence. This independent, yearlong research and practice is complemented by visits from relevant professionals from the field and ex-students, careers talks that address generic skills and knowledge such as networking, CV design, business and ethics as well as lectures on business law, fees and copyright. Students have to document and reflect critically upon the experience through a written and illustrated report that serves as a resource for them and for future students on the course. Successes have been recorded on many levels as well. By making contact with

successful practitioners, students received first-hand and current information from professionals working at the top of their field; information that was realistic, inspiring and useful provided by people they respect and admire. Research and engaging with employers forces students to make practical studio decisions throughout the year that reflect the understanding they gained from those they seek to work for. They leave the university armed with a tested list of contacts and a clear sense of their position within in the workforce. Students thus have the chance to test and challenge their understanding of commercial protocol and take a firm hold of their own learning, directing themselves and seeking information and support outside of the academic environment. Working individually and with the support of their peers and tutors, students have bridged the gap between university and commercial work. Most students have worked for major clients and had success in competitions, exhibitions and external projects. Through their work experience, it is reported that all students have made the transition to operating professionally during their final year of study. This bolsters confidence for the individual and brings recognition to the programme.

Martin *et al.* (2012:34-40) provide an overview of a variety of WIL activities at Massey University in New Zealand. The WIL experience is increasingly providing a point of difference for students in enhancing their employability. There are certain foreshadowing considerations that influence the setting-up of WIL: placement requirements, support, selection, location and addressing risk management issues. A variety of compulsory and optional WIL approaches is used that include both scaffolded and final-year projects/placements. Each approach has a place, purpose and constraints for further development that are largely based on strategic decisions within the university and are contingent on the provision of appropriate organisational support of staff. The teaching methods/pedagogies used consistently include theory-based lectures and laboratories, oral presentations, scenario-based learning and project work. The main forms of assessment are an initial learning contract, followed by a reflective journal, oral presentation and final report by the student and the supervisors, which support an evidence portfolio approach to WIL. Formative feedback at various stages of the placement is also been advocated. For example, predetermining learning objectives between the student and academic supervisor before the placement, alongside ongoing

feedback between the student and work supervisor during the course of the placement, recognises that reality may dictate how well or even whether these outcomes can be met.

Choy and Delahaye (2009:1-10) report on the application of WIL at the Queensland University of Technology in Australia. They have found that to maintain a competitive advantage universities have to extend pragmatic outlooks and champion closer relationships with industry since there is now wide acknowledgment that the success of WIL at universities hinges on a close partnership with industry. Their report presents a set of principles for universities and industries for partnership to enhance the alignment of academic curriculum to meet organisational and individual learning needs through WIL. The cohort reported on completed a Graduate Certificate in Education (Executive Leadership) course and developed leadership capacity that would enable them to manage recent reforms in the health and community services industry in the state of Queensland, Australia. The authors were granted a small grant to forge a partnership with an organisation to pilot a boutique curriculum based on the theories of workplace learning. This partnership led to the design and implementation of a boutique curriculum that was centred on the strategic objectives of the organisation.

Findings: WIL requires a considerable investment in resources by both the university and the organisation. Accordingly, WIL should be used where learning is expected to be complex, and where the benefits of the learning will be reflected in the achievement of defined strategic objectives for the organisation. From the university's point of view, experienced staff would need to be allocated to the project. Such staff would need to have knowledge of the strategic planning process and organisational culture and the ability to facilitate learning, especially self-directed learning. They need skills in brokering and connecting a curriculum that is co-designed through the partnership. For the organisation, a rational and accurate understanding of both the intended and emergent strategic plans is critical. This understanding must be shared by all who will be involved in the WIL project. The organisation will need to be prepared for the WIL project and this will include appointing a liaison person, learning about the university processes and language, and informing staff about expected outcomes and time

commitments for learning. The organisation also needs to ensure that the learning is appropriate to the organisational culture and that sufficient workplace affordances and learning spaces are available to staff.

Armstrong *et al.* (2006:1-15) highlight how the Business Studies degree programme of the University of Ulster in Northern Ireland incorporates the development of employability skills as an integral part of the preparation for, monitoring and assessment of work-based learning (WBL). For the Business Studies degree programme, formal supervised work-based learning is regarded as one of the most powerful tools in developing employability skills among its students. The following objectives are set for students in respect of WBL:

- To develop and extend the study of academic disciplines;
- To develop the ability to relate theory to practice further;
- To reflect upon their experience within the world of work and evaluate their own performance and learning experiences within this environment;
- To improve their interpersonal and social skills;
- To demonstrate innovative thinking and creativity, knowledge of future trends in the subject area and be able to communicate new ideas effectively;
- To make informed career choices and consider the professional requirements of those careers.

WBL aims to develop students' employability skills and commercial awareness through a formal and structured process. WBL preparation, monitoring and assessment of the period of work, and WBL debrief spans a period of three academic years, namely the last three years of the four-year qualification. Placement preparation sessions commence in year two in association with the Careers Service Unit. These involve a series of lectures, workshop presentations from the Placement Tutor, employers, past and present placement students, careers specialists and advisors. In this preparation, there is a clear focus on developing the student's understanding of the need to develop their employability skills. This is supported by a university-wide online work-based

learning system (WebCT). It incorporates the preparation of students for the WBL section they need to complete on WebCT as well as a CV builder. This section not only provides information and guidance on the WBL opportunities available, but also offers the students an opportunity to develop their own vocational profile through self-assessment and career decision-making activities. WBL opportunities are brought to the attention of students, through student notice boards and web-based media in order to allow students to indicate their interests. CVs and/or application forms are sent to the company and the company shortlists in accordance with its normal recruitment procedures.

After placement during the third year of study, supervision is viewed as a shared responsibility between the employer and the university represented by the Business Studies Course Team. Upon each student's appointment to an organisation, an industrial supervisor/mentor is nominated by the employer to monitor the student's progress. A provisional training programme is formulated, which clearly identifies job/personal-related objectives and employability skills that are to be developed during the WBL period. Each student is assigned an academic supervisor who is a member of the Business Studies Course Team and his or her industrial supervisor/mentor. The assessment strategy recognises the importance of employer feedback on student progress. In order to ensure consistency in employer feedback across placements, the Faculty issues guidance notes for employers, which clearly outline the assessment criteria for identified employability skills. The assessment contains three elements, namely an academic and industrial supervisor's report as well as a project together with a personal and professional development profile submitted by the student.

In association with Career Services sessions during the final year, Business Studies students are encouraged to reflect on the WBL experience in the formulation of graduate career plans. Students are normally required to present a snapshot of their placement experience to the students preparing for placement. As with any module of study within the Faculty, placement coursework is subject to the standard procedures for marking and is moderated by an external examiner. Students receive detailed feedback on their placement performance using relevant assessment *pro forma*



documents, prior to their final-year studies. The effect of WBL on degree classifications shows how students with WBL outperform their counterparts by an average of 20%.

The North Dakota State University (NDSU) defines Cooperative Education (Co-op) and Internships as career-related, paid work experiences taken for academic credit with the following alternatives available with regards to the application thereof (North Dakota State University 2014:1-3):

- “Parallel: Students work part-time with a local employer and still take classes at NDSU.
- Alternating: Students alternate between attending classes on campus full-time for a semester and working full-time on a Co-op/Intern assignment for a semester.
- One Semester: Students work on a Co-op/Intern assignment for one semester only.
- Consecutive: Students work two or three semesters in a row. Co-op/Intern assignments may be completed during any semester.”

The NDSU Career Center acts as a facilitator between the faculty, students and employers. Students are prepared for placement by means of CV and cover letter critiques, interview/job search preparation, mock interviews and graduate school preparation. Employers are expected to pay the student a wage that must meet or exceed the state's minimum wage, employ the student in a position that provides career-related work experience and supervise and evaluate the student's work performance. Students must apply the academic principles learned in classrooms to real-world situations. Internships are also regarded as structured learning where faculty members establish the learning objectives and evaluate the success of the internship. The work agreement between the employer and the student is approved by the relevant faculty member who also makes site visits to evaluate the progress of the internship and can initiate changes to assist students to meet the learning objectives. The combination of theory with real-world experience provides a smooth transition to full-time employment for students as well as a solid recruiting investment to employers who also



benefit from increasing their workforce diversity and their own employees to build supervisory skills.

According to the University of Cincinnati (2014:1-8), Cooperative Education was invented by Herman Schneider at the University of Cincinnati (UC) in 1906. This innovative approach seeks theory-practice integration, contextual complexity and community engagement to develop and nurture learning that is self-directed, integrative and transformational. All UC undergraduate students should engage in at least one type of experiential learning during their programme, such as international experience, internship, undergraduate research, service learning, clinical learning programmes, co-op, performance or exhibit, practicum and transformation courses that are specially designed learning experiences where students develop the disposition to work across disciplines and are encouraged to become transdisciplinary team members who create new ways of thinking and doing. The ideal facilitation of experiential learning involves preparation and placement of students into contextual environments where they can apply knowledge and skills gained at university practically and subsequently engage students in meaningful reflection upon these authentic experiences. The university's application of WIL is a fully integrative approach built around the Integrated Core Learning (ICL) principle as the essence of undergraduate learning at UC. The goal of ICL is the thoughtful integration of the general education core, major course work, undergraduate research, practicum, clinical placements, co-op and service learning experiences, co-curricular activities, and faculty-guided reflection throughout the undergraduate curriculum with the aim to create a transformative individual educational experience.

The University of Waterloo in Canada has reportedly the largest Cooperative Education programme in the world with a cooperative education student employment rate of 95,6% (University of Waterloo 2014b:1). This employment rate is achieved through the following application of WIL at the university: (University of Waterloo 2014a:1):

Cooperative education is described as the combination of academic studies with work experience where academic terms alternate with work terms forming study/work

sequences. A total of up to two years of cooperative education (co-op) can be completed. In most programmes, co-op takes about five academic years to complete with up to six, four-month work terms included in the curriculum. Cooperative Education & Career Action (CECA) manages the co-op system and career-related services for the university, which involves liaison with students, employers, alumni, as well as faculties and departments from this central base. The co-op programme is accredited by the Canadian Association for Cooperative Education (CAFCE) and includes the following:

- Each job (placement) is approved by Cooperative Education (CECA);
- Students are engaged in productive work rather than just observing;
- Some form of remuneration is paid to students;
- Student's progress is monitored by Cooperative Education (CECA);
- Students are evaluated by employers;
- The total amount of co-op experience totals 50% of the time spent in academic study, and not less than 30%.

The goals of Cooperative Education are to:

- Actively support students through the job search process, during and following the work term;
- Work with students, employers, alumni, and Waterloo faculties and departments to determine employment needs and opportunities;
- Recruit relevant and high-quality employers;
- Provide high-quality service to meet stakeholders' needs;
- Offer career guidance to co-op students;
- Improve the co-op system and employment process;

Further insight into the application of the co-op programme is gained through the following responsibilities that students have:

- The application of learning goals and objectives set for the work term;
- Recording of major work tasks, assignments, and accomplishments;
- While busy with the co-op work term, to take an online Professional Development (WatPD) course which will help students develop professional workplace skills to make them more valuable employees;
- Writing a professional work report that relates to the student's employer. This report is a requirement of the degree and is submitted to the relevant faculty or programme department for grading;
- At the end of the co-op work term, the student and employer must complete and submit a work-performance evaluation form for credit as part of the co-op programme.

Devins (2013:1-35) reports on the results of a research project to develop a framework for accrediting higher education provision of work based learning (WBL) through the development and implementation of an integrated curriculum that matches the planning and delivery of learner experiences with employer and labour market needs. The framework is designed to articulate a set of indicative principles and practice guidelines to raise awareness of WBL and to inform the development of work based learning as integrated curriculum (WBLIC) in higher education (HE). The participants in the project were the company 3s Unternehmensberatung GmbH in Austria, the German Academy of Employees (DAA) as well as Vaasa University of Applied Sciences in Finland, Cracow University of Economics in Poland, Czech University in Prague, University Jaume in Spain, FH Joanneum University of Applied Science in Austria as well as the Leeds Metropolitan University in England. The results of the project can be reported as follows:

- The development of partnerships between HEIs and employers is a critical factor in identifying learning requirements, improving the relevance of education and facilitating access to education and learning. WBLIC directly supports this vision, improving the employability of learners seeking to enter, adapt and progress in a changing labour market, whilst at the same time developing the higher-level skills

that are viewed as a key driver of current and future individual success and societal prosperity.

- WBL is a learning process which focuses university-level thinking upon work (paid or unpaid) in order to facilitate the acquisition recognition and application of individual and collective knowledge, skills and abilities to achieve specific accredited outcomes of significance to the learner, their work and the university.
- Where traditional approaches to curriculum development are grounded in the philosophy and theories of academic disciplines, WBLIC is largely founded upon the identification of labour market need as a key driver of programme development. The WBLIC approach is characterised by employers and the requirements of the labour market exerting an influence on the development and delivery of the curriculum at each stage of the development cycle.
- An essential requirement for effective WBLIC is the establishment of partnerships between HE and employers in order to provide a context where learning experiences, knowledge, ideas and resources are shared. Trust and the opportunity to work on problems and issues of mutual concern to produce substantive results are two important elements in developing high quality relationships.
- Developing the capacity of HE to support WBLIC often challenges the status quo across a range of critical areas, including pedagogy, resource allocation, regulatory frameworks and organisational structures.
- A range of factors is involved in the successful development and delivery of WBLIC from a human capital perspective. These include internal and external academic staff, administrators, professionals, practitioners, employer representatives and the learners themselves. The skills, competencies and abilities of these actors and groups are a key factor in the success of WBLIC.
- The critical issues to bear in mind are the importance of partnerships with and the involvement of employers in the curriculum, the commitment of universities to WBL as well as the development of people.

A study by Billett (2011:16-23) has determined that the intentional organisation of experiences for higher education students and how those experiences are enacted and then engaged with by students is the key to understanding how the provision of WIL might best progress. These curriculum intentions and enactment thereof by six participating universities (Flinders, Griffith, La Trobe, James Cook, Murdoch and Newcastle) are presented below by means of what is described as the intended, enacted and experienced curriculum.

The intended curriculum is exactly that: what is intended to occur and be achieved (i.e. knowledge learned) through enacting the curriculum. The key considerations associated with the intended curriculum to support work-integrated learning comprise:

- being clear about what needs to be learned (i.e. the intended learning outcomes) in order to identify what experiences are likely to secure that learning;
- aligning the kinds of experiences provided for students with the intended learning outcomes;
- organising a gradual and staged engagement with practice-based experiences seems to suit many educational purposes;
- aligning the duration of particular experiences with their educational purpose (e.g. orientation versus skill development);
- acknowledging practice settings as providing experiences to understand the requirements of practice, not merely places to practice, and taking this into consideration when sequencing experiences in academic and practice settings; and
- intentionally sequencing preparatory experiences and opportunities to consolidate and reconcile learning after practice experiences into the curriculum.

The enacted curriculum is that which is implemented by teachers in academic settings or provided through experiences in practice settings when that what is intended for students is enacted. Often, the enacted curriculum is very much shaped by what is

available in terms of teachers' expertise, resources available and readiness of students. The important elements to take note of are the following:

- teachers' interest in learning in practice settings, and their capability to enact the effective integration, are likely to effect and shape the experiences that are enacted profoundly;
- these capabilities may extend to coaching and assisting students to reconcile their experiences;
- teachers' knowledge of and engagement with practice settings beyond the university are also likely to influence how they enact experiences for their students, including communications with those settings;
- the availability of resources and access to practice-based settings will determine the range of possible experiences for students;
- there may well be a need to augment or maximise the available opportunities (e.g. in regional settings);
- the level of supervision needs to balance managing potential harm with securing students' learning;
- the need to consider options other than supervised placements to secure intended educational purposes, including students' paid part-time work, their professional employment, opportunities for observation, shadowing, etc.;
- students' readiness (e.g. interest, capacities, confidence) needs to be accounted for when enacting particular kinds of experiences;
- the likely need to organise orientations before students engage in practice settings, utilise opportunities for support during practice-based experiences, and provide interludes for sharing and reflections after them;
- additional or specific experiences may be required for particular student cohorts (e.g. overseas students);

- the gradual and staged enactment of experiences in practice settings seems well aligned to building confidence, capacities and interest.

Ultimately, learning within higher education is something undertaken by individual students and this learning arises from how they construe and construct what they experience and how they elect to engage with that experience. This refers to the experienced curriculum, which is what students experience when they engage with what was intended through what is enacted and how they learn through that experience. Some key issues associated with the experienced curriculum are:

- students' interest is central to the quality of their engagement and learning in practice settings, and reconciling this learning within the course of study;
- the level of their readiness will shape students' responses to the sequencing, duration and rotation of experiences in practice settings, and how they come to reconcile those experiences within their university course;
- the level of readiness is most evident when there is conflict or contrary demands between workplace and university requirements;
- different kinds of readiness have particular implications for students' learning (e.g. international students' lack of knowledge about social, institutional and local practices, domestic students' naïveté and idealisation of their selected occupations);
- the need to view issues associated with readiness as a duality comprising i) the students' experience; and ii) the requirements of the workplace and academic institution;
- immediate and pressing concerns such as performing adequately in a forthcoming practice-setting experience is likely to be the focus of students' interest;
- identifying premises for students' interest and engagement is likely to be quite salient for enacting and realising effective learning outcomes in practice settings;
- students' confidence likely mediates their engagement in practice settings;

- early and staged engagement in practice settings seems to boost many students' confidence to re-engage and learn effectively;
- challenges to personal confidence and sense of competence through practice based experiences can be redressed by effective group processes, including sharing of experiences.

Orrell (2004:3-9) provides more information regarding the application of WIL at Flinders University where the university's concern for integrating graduate employability into the curriculum has developed a university culture where the teaching of work-based skills and discipline-based learning complement and enhance each other. The strategies that underpin this cultural change focus on four key areas. The first area concentrates attention on the development of intra-institutional partnerships between administration, faculty and service units to generate a cooperative university climate for managing work placement programmes and to assist institutional change. The second area involves the optimisation of students' opportunities to acquire and develop work-related skills that complement and build on learning experiences. The third area includes a focus on staff development via a cross-institutional forum. The fourth area concentrates on the enhancement of university/industry collaborations with work-placement providers to begin to achieve a learning-focused, stakeholder approach to forming partnerships with host organisations. The strategies that underpin the cultural change and four key areas are summarised below.

#### Cross-institutional Practicum Forum

- A forum for professional and vocational education programmes was formed to utilise and build upon existing strengths and knowledge of individuals concerning designing, managing, supervising, assessing and evaluating work-placement programmes.
- Additional public forums established shared responsibilities and knowledge building between academics, professional service providers and administrators on risk management and quality.



## Cross-institutional Audit of Work-integrated Programmes

- The conduct of a systematic, structured, interview-based audit of all practicum programmes run in conjunction with Flinders courses that identified the scope and diversity of practica at Flinders, as well as recording effective educational practices, concerns and risk management strategies.

## Development of Generic Resources

- Development of generic resources that can be adopted by and to different disciplines to meet specific requirements. These include an online programme for assisting students to become workplace literate before their placement as well as links to a Transferable Skills Portfolio innovation project.

## Support and Enhancement of the Careers and Industry Liaison Unit

- Funding new positions in the Careers and Industry Liaison Service includes collaborating with the Alumni for the provision of mentoring and leadership to current students and graduates.

## Central Administration Policy Review

- Policy development and review to ensure the needs of students in work-based learning contexts are accounted for and that the work of academics in this arena is legitimised.

## Intensified Engagement with Industry Partners

- Recognition of the significant contributions of providers in public forums.
- Induction to university teaching for industry providers.

In summarising the applications of WIL presented above, the most pertinent issues identified are the following:

- The point of departure is that WIL is approached as a curriculum matter which necessitates constructive alignment in collaboration with employers, together with the inclusion of employability as a central issue as part of all programmes.
- WIL can be presented in a parallel, alternating or consecutive manner, adding to the flexibility of WIL.
- Students and employers play a central role with regard to the successful application of WIL, which is underpinned by strong partnerships and effective relationships between all stakeholders.
- The preparation of students for WIL is done in a formal and integrated manner.
- A definite pattern or cycle of activities is followed before, during and after placement.
- Reflection is a key issue to achieve effective integration of theory and practice, as well as enhance the personal development of students.
- The workplace and technology can be used in an effective and innovative manner to situate the learning of students through careful preparation of the workplace.
- WIL requires the allocation of resources, together with a culture of support from both employers and the university.

#### **4.4 CONCLUSION**

In summary, it is necessary to measure and compare the various applications of WIL presented against the framework established regarding the application of WIL in higher education. Best-practice principles will be established by matching the pertinent issues regarding the application of WIL with the framework established as indicated in Table 4.1 below.

*Table 4.1: Comparison of framework and applications of WIL*

<b>Framework</b>	<b>Applications of WIL</b>
An institutional commitment to WIL that is supported by adequate resources as well as appropriate policy and approaches that recognise WIL as a legitimate and valued academic endeavour.	WIL requires the allocation of resources together with a culture of support from both employers and the university.
Establishing and maintaining strong partnerships with employers, which require regular and open communication between all stakeholders throughout the WIL process.	Students and employers play a central role with regard to the successful application of WIL, which is underpinned by strong partnerships and effective relationships between all stakeholders.
The changing world of work, together with advances in technology also creates new opportunities for WIL such as virtual placements.	The workplace and technology can be used in an effective and innovative manner to situate the learning of students through careful preparation of the workplace.
Students are regarded as the nexus between the classroom and the workplace, which makes the comprehensive preparation of students for WIL a critical issue.	The preparation of students for WIL is done in a formal and integrated manner.
Expectations and responsibilities must be very clearly determined between the university, students and employers in terms how WIL is presented in respect of the quality cycle for WIL.	WIL can be presented in a parallel, alternating or consecutive manner adding to the flexibility of WIL.  A definite pattern or cycle of activities is followed before, during and after placement.
WIL is a curriculum issue of which critical reflection and integration processes differentiate WIL from normal work experience programmes.	The point of departure is that WIL is approached as a curriculum matter, which necessitates constructive alignment in collaboration with employers, together with the inclusion of employability as a central issue.

	Reflection is a key issue to achieve effective integration of theory and practice as well as enhance the personal development of students.
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There is a very close match between the pertinent issues identified in respect of the application of WIL by universities and the framework established for the application of WIL in higher education. It can thus be argued and concluded that the framework for WIL established above can be regarded as best-practice principles to consider when drafting a strategy for the purpose of the study. The next step will be to determine an appropriate research design to address the main research question: How can the contribution of WIL towards the employability of students be optimised in one comprehensive strategy?

## **CHAPTER 5**

### **RESEARCH METHODOLOGY**

#### **5.1 INTRODUCTION**

This chapter describes and provides an overview of the research design, together with methodologies and strategies that were considered and selected for the purpose of this study. An explanation is also provided with regard to the methods of data collection, the selection of participants, the data collection process, analysis of data and the measures employed to ensure objectivity, validity and reliability.

#### **5.2 METHODOLOGY**

According to Polit and Hungler (2004:233), methodology refers to ways of obtaining, organising and analysing data. Henning *et al.* (2004:36) describe methodology as a “coherent group of methods that complement one another and that have the ability to fit to deliver data and findings that will reflect the research question and suit the research purpose”. Methodology therefore sets a framework on which methods and procedures are based as informed by the nature of the research question.

##### **5.2.1 Research philosophy/paradigm**

The study necessitated a mixed-method approach, which implies employing both a positivist and post-positivistic approach. A positivist paradigm provides for a systematic and scientific approach to research where the emphasis is on measurement (whether this be of scientific quantities, e.g. time or speed through experimental activities), or of attitudes, behaviours and opinions through surveys and questionnaires (University of the West of England 2013:1). This approach also assists with generalisation and quantifiable observations to evaluate results with the aid of statistical methods (Williams 2011:1). A post-positivistic approach, according to Golafshani (2003:596), seeks to understand phenomena in context-specific settings. It does not only rely on statistics or numbers, but is aimed at gaining insight into people's attitudes, behaviours, concerns

and motivations (Ereaut, 2007:2). It is concerned with collecting in-depth information and should thus be undertaken to achieve a deep understanding of the issues when one needs to trade detail for generalisability and to generate new theories or hypotheses (Trochim, 2006:1-4; DJS Research Ltd, 2009:1).

### **5.2.2 Research design**

Hara (1995:7) describes quantitative research as an endless pursuit of facts, while Golafshani (2003:597) emphasises the measurement and analysis of causal relationships between variables. It was relevant to this research, since findings are presented in numerical format and questions require a choice between definite answers (Cohen *et al.* 2007:5-26). In qualitative research, the emphasis is on “understanding through looking closely at people’s words, actions and records”, as described by Maykut and Morehouse (1994:92). The aim is to create descriptive analyses that emphasise deep and interpretive understanding of the subject under investigation, according to Henning *et al.* (2004:21).

A quantitative study is about determining the relationship between variables, i.e. independent (IV) and dependent variables (DV). In this case, the independent variable is WIL and the dependent variable the employability of students. In an experiment, the IV is the variable that is varied or manipulated and the DV is the response that is measured; therefore, the IV is the presumed cause and the DV the presumed effect (Williams, 2006:1). Kerlinger (1986:32) also states that,

In non-experimental research, where there is no experimental manipulation, the IV is the variable that 'logically' has some effect on a DV. For example, in the research on cigarette smoking and lung cancer, cigarette smoking, which has already been done by many subjects, is the independent variable.

Quantitative research is also classified as either descriptive or experimental. A descriptive study establishes associations between variables, whereas an experimental design establishes causality (Hopkins 2000:1). Descriptive studies thus measure subjects once as they are, whereas in experimental studies, subjects are measured before and after treatment, which makes a descriptive study applicable to this research.

A summary of the features of quantitative and qualitative research is provided by Neill (2007:1-2) in Table 5.1 below:

*Table 5.1: Features of Qualitative and Quantitative Research*

<b>Qualitative</b>	<b>Quantitative</b>
The aim is a complete, detailed description.	The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.
Researcher may only roughly know in advance what he/she is looking for.	Researcher clearly knows in advance what he/she is looking for.
Recommended during earlier phases of research projects.	Recommended during later phases of research projects.
The design emerges as the study unfolds.	All aspects of the study are carefully designed before data are collected.
Researcher is the data-gathering instrument.	Researcher uses tools, such as questionnaires or equipment to collect numerical data.
Data are in the form of words, pictures or objects.	Data are in the form of numbers and statistics.
Subjective – individuals' interpretation of events is important, e.g. uses participant observation, in-depth interviews, etc.	Objective – seeks precise measurement and analysis of target concepts, e.g. uses surveys, questionnaires, etc.
Qualitative data are more 'rich', time consuming, and less able to be generalised.	Quantitative data are more efficient, able to test hypotheses, but may miss contextual detail.

Researcher tends to become subjectively immersed in the subject matter.

Researcher tends to remain objectively separated from the subject matter.

### 5.2.3 Research methods and strategies for empirical research

Various methods and strategies were identified and considered relevant to the study. These methods and strategies will now be discussed briefly to explain the rationale for the relevant methods and strategies selected.

#### 5.2.3.1 Quantitative methods

##### (a) Surveys

The aim of this research corresponds to what Morrison (in Cohen *et al.* 2007:206) states as useful with regard to surveys, namely that “it gathers data on a one-shot basis; ascertains correlations and provides descriptive, inferential and explanatory information”, as concurred by Survio (2013:1). In determining the benefits or skills developed through WIL related to employability quantitatively, it was necessary to gather data at a particular point in time to determine which benefits are associated with and which skills are developed through WIL, as described by Cohen *et al.* (2007:205).

##### (b) Ex post-facto research

In order to determine the benefits or skills developed through WIL related to employability, it was necessary to look retrospectively. This implies that WIL should have occurred before the benefits or skills developed can be determined. Ex post-facto research is defined (Kowalczyk 2013:2) as research in which the independent variable or variables, such as WIL in this case, have already occurred and in which the researcher starts with the observation of a dependant variable or variables, as in this case the employability of students. The researcher then studies the independent



variable or variables in retrospect for their possible relationship to, and effects on, the dependent variable or variables (Kerlinger in Cohen *et al.* 2007:264).

#### (c) Quasi-experiments

According to The Virtual Psychology Classroom (2011:1-2) and Research Connections (2013:2), quasi-experiments come in several forms, such as a pre-experimental design: the one group pre-test-post-test and a pre-experimental design and the pre-test-post-test non-equivalent group design, while Cohen *et al.* (2007:282-283) explain that the one-group pre-test-post-test is very often used to report about the value of a new teaching method or some curriculum innovation (such as WIL). The researcher measures a group on a dependant variable (employability of students) and then introduces an experimental manipulation (WIL). Following the “treatment” (of WIL), the researcher measures the dependant variable again and then proceeds to account for differences between pre-test and post-test scores. Similarly, the pre-test-post-test non-equivalent group design will involve an experimental and control group whereby only the experimental group will receive “treatment” and comparisons are then made between the two groups.

The aim of this research corresponds to what Morrison (in Cohen *et al.* 2007:206) states as useful with regard to surveys, namely “it gathers data on a one-shot basis; ascertains correlations and provides descriptive, inferential and explanatory information”. In developing a strategy to optimise the contribution of WIL towards the employability of students, it was necessary to gather data at a particular point in time to determine what kind of a relationship existed between WIL and the employability of students as described by Cohen *et al.* (2007:205).

#### (d) Method selected

A survey was selected as the most appropriate method, since causality as proposed in quasi-experiments was not the issue, but rather a descriptive study that produces associations. No pre-test was done either. A survey, instead of *ex post facto* research was preferred, mainly because of the ascertainment of associations and provision of

descriptive and explanatory information that it provided, which was required for this study.

### 5.2.3.2 *Quantitative strategies*

#### (a) Questionnaires

The selection of a survey as the method that was used, as indicated above, makes use of a questionnaire an appropriate strategy, since a questionnaire is a widely used and a useful instrument for collecting survey information, providing structured, often numerical data, which can be administered without the presence of the researcher. It is often comparatively straightforward to analyse (Roddy & Allsop 2006:1-3). It was required to obtain the rating, views and opinions of selected employers regarding the contribution of WIL towards the employability of students in this manner. The design of the questionnaire also had to consider ethical issues, construction of questions and the layout, according to the University of Sheffield (2014:2).

#### (b) Non-parametric tests

Boston University (2013:1-2) describes the attraction of non-parametric tests as their utility for small samples, because they do not make assumptions about how normal, even and regular the distributions of scores will be. They also have the advantage of being tailored to particular institutional, departmental and individual circumstances and can provide lecturers with quick, relevant and focused feedback on student performance (Cohen *et al.* 2007:415). This was relevant to the intention of this study, which did not involve a larger number of employers, since a sample of employers involved with WIL had to be selected. This sample had to be tailored to individual circumstances and to provide feedback on the contribution of WIL towards the employability of students.

#### (c) Domain-referenced tests

Oxford Reference (2014:1) defines a domain-referenced test as “test that measures an attribute by estimating the proportion of a specified content domain of knowledge, skills, or abilities the respondent has acquired”. Gipps (in Cohen *et al.* 2007:416) therefore

states that these tests are a result of criterion-referenced testing. Considerable significance is given to the careful and detailed specification of the content or the domain to be assessed, of which the domain is the particular field or area of a subject that will be tested, according to Cohen *et al.* (2007:416). This type of testing is in line with the purpose of this study, since the focus is on WIL as one aspect of the curriculum and not the entire curriculum.

#### (d) Strategy selected

A questionnaire with closed questions was selected. Closed questions have a list of possible answers from which respondents must choose and include yes/no questions, true/false questions, multiple choice, or scaled questions which are easy to code and interpret and enhances credibility based on it being widely used (Explorable 2015:2). Likert-scale questions were also used. These are described as a psychometric scale commonly involved in research based on survey questionnaires where the respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale (normally 1-5 representing 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree) for a series of statements while responding to a particular Likert questionnaire item, which captures the intensity of their feelings for a given item (Barua 2013:35). It is also widely used and thus further enhances credibility together with validity and reliability and can be administered without the presence of the researcher to enhance objectivity and is comparatively straightforward to analyse (Croasmun & Ostrom 2011:19-20).

#### 5.2.3.3 Qualitative methods

Due to the size and location of the sample selected (30 students and staff: one student who had completed WIL and one lecturer responsible for the monitoring and assessment of WIL per department with programmes that contain a compulsory WIL component at CUT in Bloemfontein and Welkom), the methods and strategies considered were limited to internet-based surveys, interviews and open-ended questionnaires, as described by Cohen *et al.* (2007:226-283; 317-383). The reasons

why an internet based survey in combination with a qualitative “on-site” survey and an open-ended questionnaire were selected will now be discussed briefly.

#### (a) Internet-based surveys and qualitative on-site surveys

Internet-based surveys have their own set of features. It can be e-mails, or e-mails with attachments of the questionnaire itself, to e-mails directing respondents to a website, or simply websites. It reduces cost, a wider and larger population can be accessed, while reduced human error in entering and processing data online is one of the advantages listed (Hertel, Niedner & Herrmann 2003:1159-1177; Cohen *et al.* 2007:282-283). This method enhances the distribution of open-ended questions nationally and to other parts of the world where WIL is practised, as indicated in Chapters 2 and 4. Due to the size and location of the sample selected (students and staff at CUT in Bloemfontein and Welkom) an internet-based survey supplemented with an “on-site” qualitative survey was selected to achieve a higher response rate than an internet-based survey alone without compromising on objectivity (Jansen 2010:1-15).

#### 5.2.3.4 *Qualitative strategies*

##### (a) Open-ended questions

Research questions in qualitative research help to narrow down the purpose of the study to specific open-ended, general questions that the researcher would like answered during the study according to Creswell (2005:136). These questions are of particular relevance to add an extra dimension to what will be possible through a quantitative analysis alone. The views and opinions of students and staff are important to determine stakeholders’ views regarding a strategy to be developed for WIL towards optimising the employability of students and to add an exploratory element to the research, especially in view of conclusions to be drawn and recommendations to be made. Open-ended questions produce rich and personal data, due to the further insight with all the subtleties and nuances this implies (McIntyre 2013:1), which is necessary to determine the views of stakeholders accurately in respect of the strategy that had to be

developed. It is also labelled by Cohen *et al.* (2007:329) as a very attractive device for smaller-scale research, as in this case.

Open-ended questions were preferred to interviews due to the size of the sample being 30. In a certain sense, it can also be regarded as another learning activity for the students, since they had to reflect on their experiences.

#### **5.2.4 Population**

In terms of the quantitative study, the target population comprised all the employers used for WIL by the Central University of Technology, Free State. The target group was the active employers for WIL on the database during the 2011–2014 periods, namely 694 employers.

For the qualitative study, the target population was all students and lecturers in those programmes offered at CUT that contain a compulsory WIL component. The target group was the students who had completed WIL and the lecturers responsible for the monitoring and assessment of students placed for WIL.

#### **5.2.5 Sampling**

The sample size was determined as a percentage of the active employers for WIL on the WIL database during the 2011–2014 periods. As a representative sample was required that enables generalisation, an appropriate sampling method (Stoker 1981:4) needed to be selected. According to Stoker (1981:7), the size of the sample should be determined in proportion to  $\sqrt{\frac{N}{20}} \times 20$ . In accordance with this formula, the sample in this study was 118 employers, as determined from the target group of 694 (N). The sample was further divided into sub-categories per qualification on a proportionate basis. This implied, for example, that should the employers of the Tourism Management qualification constitute 15% of the target population, these employers should also be 15% of the sample determined. The identification of specific employers to include in the sample was done on a scientific basis with the aid of statistical tables.

The sample size for the qualitative study was 30, determined as one student who had completed WIL, and one lecturer responsible for the monitoring and assessment of WIL per department with programmes that contain a compulsory WIL component.

### **5.2.6 Data collection**

For the quantitative study data were collected by means of a questionnaire with close-ended questions as explained above. According to Trochim (2006:24), the Likert scale used was further elaborated on as a one-dimensional scaling method, used for measuring by “asking people to respond to a series of statements about a topic” and “assumes that the strength/intensity of experience is linear, i.e. on a continuum from strongly agree to strongly disagree”, as described by McLeod (2008:1).

Internet-based surveys, together with face-to-face interviews were used to collect data for the qualitative study by means of a questionnaire with open-ended questions, as it enabled the researcher to establish rapport with potential participants and gain their cooperation in this manner. By the nature thereof, these interviews yield the highest response rates in survey research. An opportunity was presented to the researcher to clarify ambiguous answers and when appropriate, seek follow-up information. In addition, telephonic interviews were used where appropriate as these interviews were less time consuming and less expensive (University of Wisconsin 2012:1). Field workers were also used to assist with data collection.

### **5.2.7 Data analysis**

The responses to the close-ended questions were captured in table format, from where it was possible to produce both descriptive and inferential statistics (My Market Research Methods 2011:1-2). Descriptive statistics included statistical procedures that can be used to describe the population studied in this regard.

Inferential statistics enabled the researcher to make predictions or inferences about the population studied from analyses of the sample selected and to generalise it to the larger population that the sample represented (Crossman 2013:1). Such statistics were required to determine whether a correlation exists between the competencies and skills

required by employers in the various occupations and industries they represent, for example engineering, tourism, education, marketing, etc. It also enabled the researcher to determine whether an imbalance existed between the students' skills and those required by employers, what the six most important skills were in every industry or occupation and what were the best ways to acquire those skills through WIL. The SAS version 9.1.3 software package was thus used as a proven package to produce reliable inferential and descriptive statistics, as stated by Dembe *et al.* (2011:1-5).

The qualitative data were analysed by means of a matrix analysis. A matrix is defined as “a set of numbers or terms arranged in rows and columns; that within which, or within and from which, something originates, takes form, or develops” (Agnes 2000:887). According to Averill (2002:855),

matrices can be valuable agents in the search for relationships between/among categories of data or phenomena of interest, in examining how categories relate to particular theoretical concepts and in the search for tentative propositions linking categories of information.

### **5.2.8 Ethical considerations**

The main ethical issues anticipated for this study and the steps taken to address it included the following (*The Research Ethics Guidebook* 2015: 1):

- Confidentiality and anonymity of research respondents
  - Participants were informed in writing about the aim of the research and were assured of anonymity and confidentiality.
- Voluntary participation and consent of respondents
  - Participants were given a choice whether to participate or not in the invitation extended to them to participate in the study.
- Avoid harm to participants

- Participants were informed in writing not to reveal their names or any other personal details. They were also given a choice to return the questionnaire by using a method preferred by them.
- Impartiality, reliability and objectivity
  - Various research methods and strategies were identified as part the literature review process, as applicable to this study. The research methods and strategies used for this study were selected in an objective manner as explained above. These are all proven methods and strategies that enhance reliability and validity. An independent statistician was also used for the data analysis.

### **5.2.9 Empirical analysis of the findings**

As an introduction to the empirical analysis in the chapters to follow, there are important issues to take note of with regard to the analyses of the findings that will be presented. It has to be borne in mind that the literature review provided the broad framework for the study and enabled the researcher to identify the relevant and key issues that require further investigation and analysis to be able to formulate the strategy concerned. The questionnaires were thus constructed based on these issues identified. The empirical phase resultantly consisted of the administration of three different questionnaires to employers (Annexure 1), students (Annexure 2) and lecturers (Annexure 3) as the stakeholders identified in the three-way partnership that WIL entails. Some of the sections of the questionnaires were the same, given the overlap in issues applicable to all three stakeholders.

The results obtained from the three questionnaires will be firstly presented, analysed and discussed in general in separate chapters per stakeholder. This is done to provide a broad overview of the opinions and ratings of each stakeholder as well as to identify the pertinent issues and trends for inclusion in the strategy on an institutional level. The focus is then narrowed down to an analysis of each of the stakeholders' opinions and ratings from a faculty perspective and an analysis of the employers' views per programme as they related to the pertinent issues and trends identified on the



institutional level. Only the differences in opinions and ratings with the institutional indicators are reported on these levels to avoid duplication. Since the sample of students and lecturers was limited to one programme per department with a compulsory WIL component due to the qualitative nature of their investigation, the number of programmes (15) is less than the number of programmes (19) to which employers responded. The analysis of the employers per programme will therefore be supplemented with the analysis of students and lecturers per programme in cases where the same programmes were responded to as applicable and relevant. The aim is thus to identify the collective top five (5) skills and qualities required on an institutional level with indications of specific differences in such skills and qualities required per faculty and qualification. This will enable the researcher to draft a strategy from an institutional (CUT) perspective with more specific indicators per faculty and qualification where required.

The closed-ended questions were analysed by a statistician to determine the statistical measures such as the mean, mode, median, standard deviation and variance. The Shapiro-Wilk test was used for continuous data to test the normality of the data (Zaiontz 2013:1-3). Should a variable not have followed a normal distribution (p-value less than 0.05) the median and interquartile range were used instead of the mean and standard deviation (Razali & Wah 2011:25). Examples of elaborations and explanations obtained with regard to closed-ended questions are also presented where applicable to elucidate the results.

In terms of the qualitative analysis the questions were largely based on and adapted from a study conducted by Jacobs (2010:100-101) regarding WIL and service learning. Responses to the open-ended questions were captured verbatim on a matrix as explained in Chapter 5. These responses were then analysed to identify similarities and trends per question. The commonalities and trends were then labelled as themes. Each response was then placed under a relevant theme, which enabled the determination of the significance of each theme in a quantitative manner. All the qualitative results are therefore quantitatively presented in graphs with supportive examples of qualitative responses where relevant.

The Kruskal-Wallis Test was also used for comparisons made between different groups to compare the median values between the groups as in cases where the data are not normally distributed (Hole 2015:1). All the analyses between groups produced a p-value of less than 0,05, which statistically indicates no significant differences between the median values and by implication that the values are more or less the same.

## CHAPTER 6

### A QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE FINDINGS: EMPLOYERS

#### 6.1 INTRODUCTION

The questionnaires were distributed via e-mail to the identified participants. Convenience sampling was used due to the location of employers in either Bloemfontein or Welkom, as well as employers in other provinces of South Africa who were part of the normal visiting schedule to employers for WIL purposes during the first semester of each year.

The sample of 118 employers was further divided into sub-categories per faculty and qualification on a proportionate basis. This implied, for example that, should the employers of the Tourism Management qualification (Faculty of Management Sciences) constitute 15% of the target population, these employers should also have been 15% of the sample determined. The response rate is indicated in Table 6.1:

*Table 6.1: WIL employers' response rate per faculty and qualification*

Faculties and qualifications	Sample	Response rate
<b>Faculty of Management Sciences</b>	<b>29</b>	<b>(25/29) = 86,21%</b>
BTech: Financial Information Systems	1	1
National Diploma: Marketing	6	7
National Diploma: Office Management and Technology	8	5
National Diploma: Hospitality Management	6	7
National Diploma: Sport Management	2	1
National Diploma: Tourism Management	6	4
<b>Faculty of Engineering &amp; Information Technology</b>	<b>38</b>	<b>(19/38) = 50%</b>
National Diploma: Building	4	1

National Diploma: Engineering: Civil	6	4
National Diploma: Engineering: Computer Systems	3	1
National Diploma: Engineering: Electrical	19	11
National Diploma: Mechanical	6	2
<b>Faculty of Health &amp; Environmental Sciences</b>	<b>20</b>	<b>(12/20) = 60%</b>
National Diploma: Agricultural Management	5	3
National Diploma: Biomedical Technology	2	1
National Diploma and B. Tech: Clinical Technology	3	2
National Diploma: Emergency Medical Care	2	1
National Diploma: Radiography	2	1
National Diploma: Somatology	2	2
National Certificate: Dental Assisting	4	2
<b>Faculty of Humanities</b>	<b>31</b>	<b>(38/31) = 122,58%</b>
<u>Teacher education:</u> BEd: (FET) and Post Graduate Certificate in Education (PGCE)	31	38
<b>TOTAL</b>	<b>118</b>	<b>(94/118) = 79,66%</b>

The results of the employers' questionnaire (Annexure 1) are presented and analysed below in accordance with the broad classification of sections in the questionnaire as indicated below. A summary of the most pertinent issues and trends identified with regard to all the sections indicated is provided at the end of the analysis.

**Section A** – General information of employers

**Section B** – Previous accommodation of WIL students

**Section C** – Skills and qualities of students

**Section D** – The WIL quality cycle

**Section E** – General issues related to WIL

**Section F** – SWOT analysis

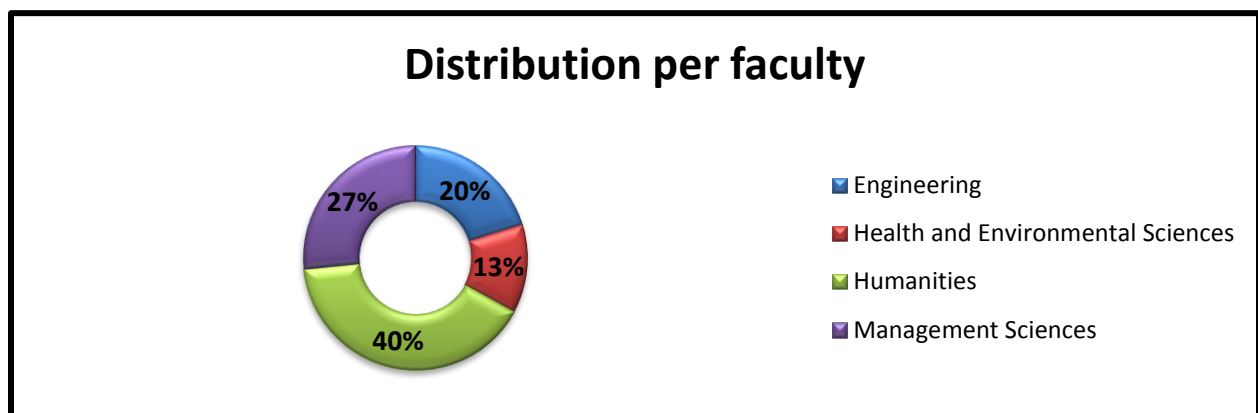
## 6.2 ANALYSIS OF EMPLOYERS' QUESTIONNAIRE RESULTS

### Section A – General information of employers

The information in this section is applicable to the following aspects, which are graphically presented below:

- Distribution of responses per faculty and qualifications of students accommodated for WIL
- Management level and WIL experience
- Size of organisations/companies
- Province(s) in which the employer is situated

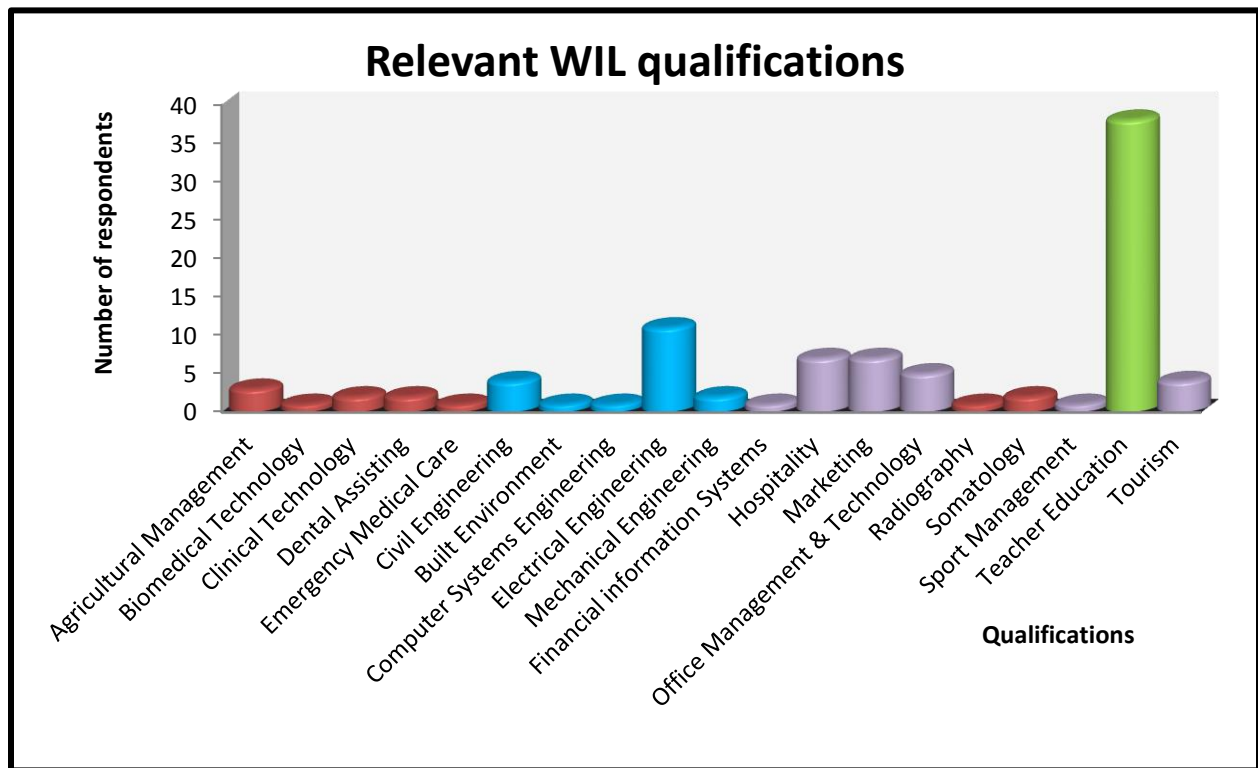
The distribution and relevance of responses received from employers with regard to faculties and qualifications are indicated in Figure 6.1 and Figure 6.2 below. As noted in Table 6.1 above, ninety-four (94) employers responded with reference to all four faculties and nineteen (19) qualifications at CUT.



*Figure 6.1: Distribution of responses per faculty*

Although the distribution seems to be skewed between faculties, cognisance has to be taken of the size of the various faculties in terms of the number of employers per faculty as well as the size of the sample per faculty and qualification. An overall response rate

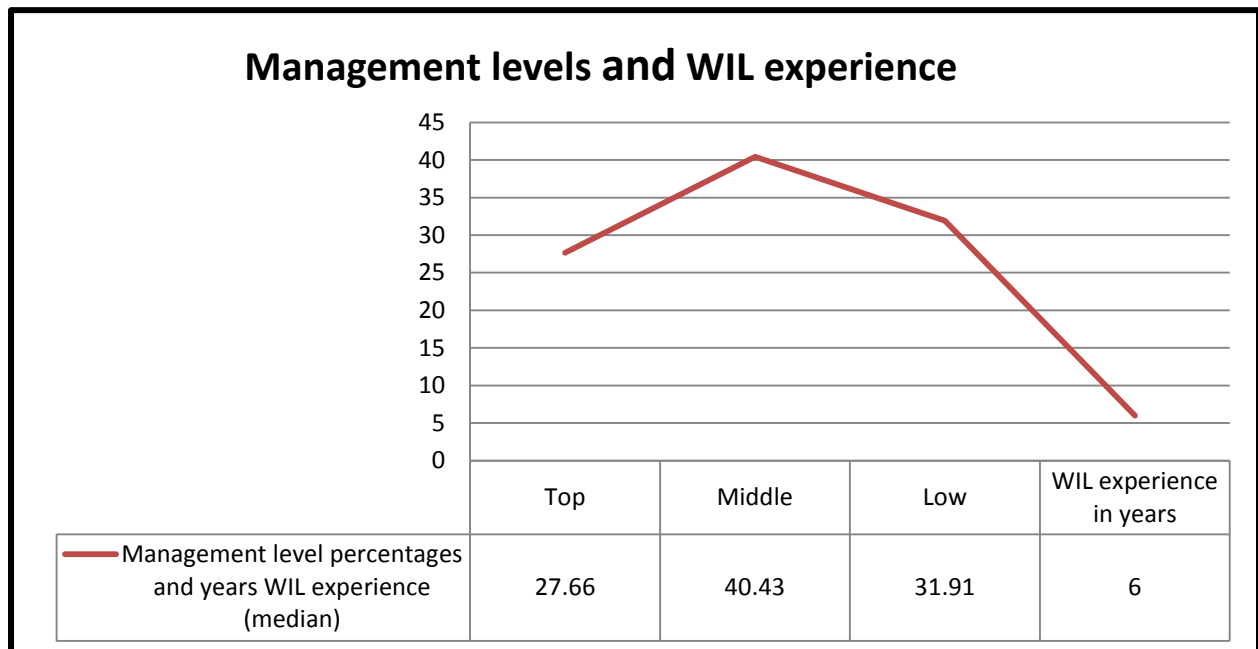
of 79,66% was achieved with a response received for every relevant qualification, as indicated in Figure 6.2 below.



*Figure 6.2: Responses per relevant qualification*

At first glance, there seems to be a distortion in the results presented in figure 6.2, especially with regard to teacher education. It needs to be noted though that teacher education is inclusive of the BEd programmes in Economic and Management Sciences, Languages, Computer Science, Natural Sciences, Mathematics and Technology as well as the Post Graduate Certificate in Education (PGCE). These programmes are grouped and presented together since multiple combinations of all these qualifications (BEd and PGCE) are accommodated at each employer (school). For example, a school with students in various combinations of four, five or six of the BEd programmes together with students in the PGCE programme. A distinction between these programmes is made when the focus is then narrowed down to a faculty and programme perspective as indicated in Chapter 5.

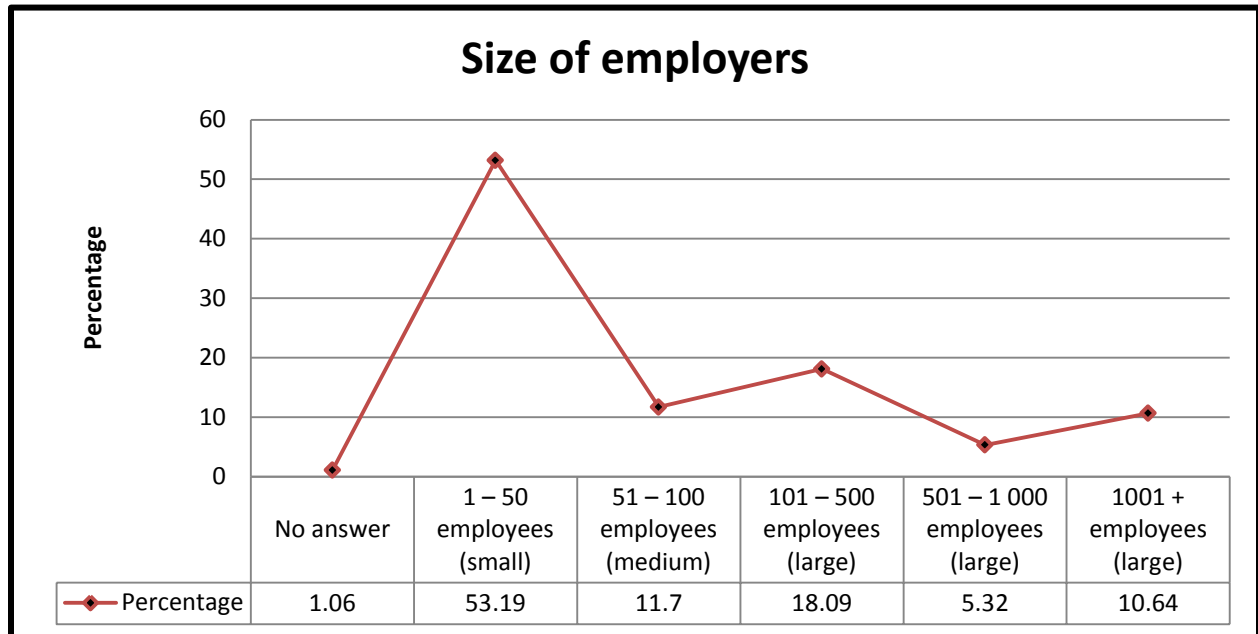
It was important to determine the management level of the staff members making decisions regarding WIL to be able to identify the level of importance attached to WIL by employers. This, coupled with WIL experience, will be informative regarding the time it ought to take decisions to be made as well as to inform the approach to be taken when negotiating placements for WIL. The WIL experience of staff varied between one (1) and thirty-two (32) years, with a median of six years' experience. It is clear that WIL is considered an important issue for employers, given that more than two-thirds of decisions regarding WIL are taken at middle and top management levels, predominantly by staff with more than five years' experience in WIL, as depicted in Figure 6.3 below. The size of employers should also be taken into account, though, as indicated in Figure 6.4.



*Figure 6.3: Management levels and WIL experience of decision makers for WIL*

The size of employers becomes significant, given the difference in dynamics and culture between small and large employers, as well as the influence thereof on the type of employer markets that students are prepared for. The preferences and needs of employers could therefore vary in terms of size, which will be determined when the analysis is further refined. Interesting to note is that most employers (53,19%) are small

in scale with a significant percentage (34,05%), which can be classified as large, with employee numbers in excess of a third of the total percentage, as indicated in Figure 6.4.



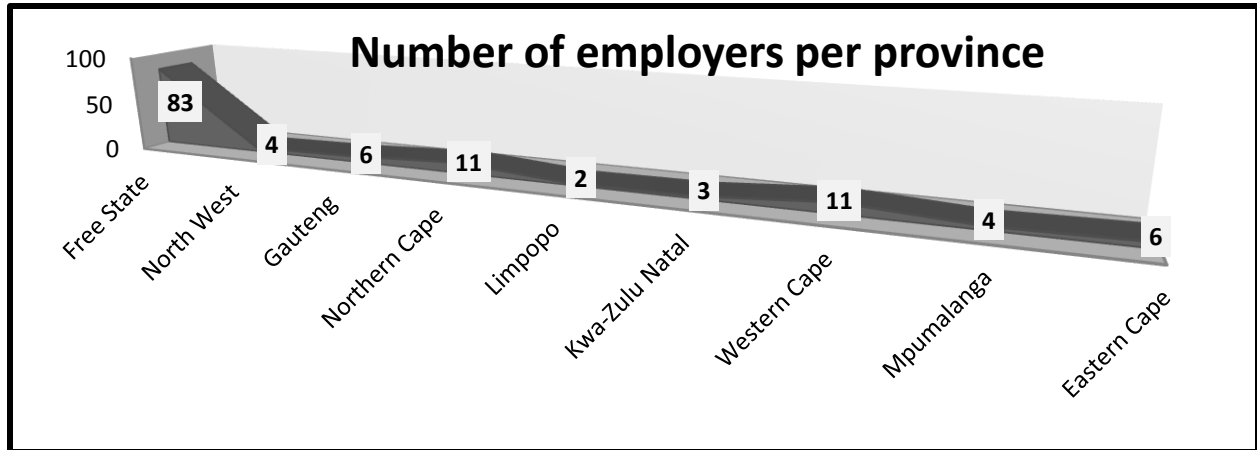
*Figure 6.4: The size of WIL employers*

Figure 6.5 indicates that employers are predominantly located in the Free State Province. Two possible reasons for this occurrence are that a convenience sample was used and that the impact of Vision 2020 of CUT is being realised, namely that,

By 2020, the Central University of Technology, Free State shall be an engaged university that focuses on producing quality social and technological innovations for socio-economic development, primarily in the Central Region of South Africa (Central University of Technology, Free State 2010:1).

It is important to note, though, that CUT has WIL employers in every province of South Africa.





*Figure 6.5: Distribution of WIL employers per province*

The next aspect considered was the record of accomplishment of these employers regarding the accommodation (placement) of students for WIL as well as the appointment of students in permanent positions.

### **Section B – Previous accommodation of WIL students**

It was necessary to determine whether empirical evidence existed at CUT and to substantiate the evidence found in the literature reviewed that WIL does enhance the employability of students. Employers were therefore requested to indicate the average number of CUT students accommodated for WIL during the period of 2011-2014 and how many of these students were offered permanent positions. In addition, employers had to indicate how many CUT students who had not completed any WIL were appointed by them to determine whether there are any differences in the number of WIL and non-WIL students employed. The question regarding the total number of WIL students accommodated from all universities was aimed at assessing the capacity of these employers for accommodating WIL students. In this manner, it could be determined where more students from CUT could possibly be placed, should a different strategy be followed. The results are summarised in Figure 6.6.

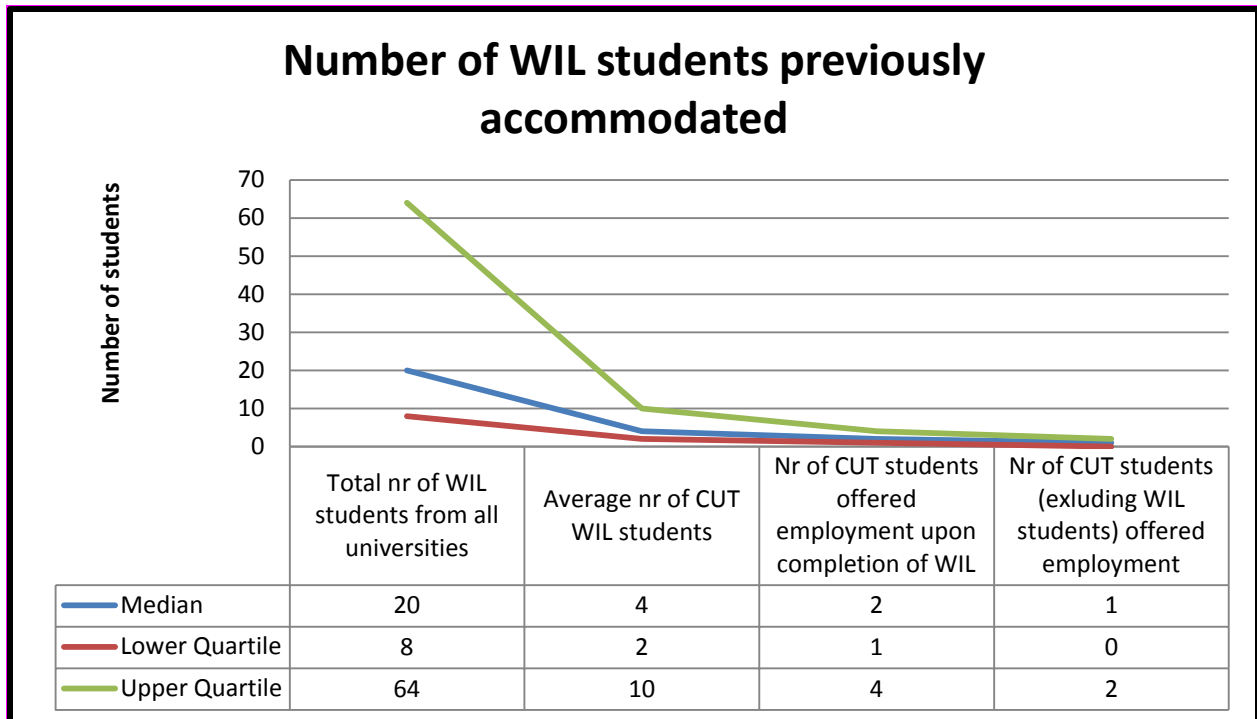


Figure 6.6: Number of WIL students accommodated and employed

The average number of CUT students accommodated for WIL is four (4). This is much fewer than the average of the combined total from all other universities, namely twenty (20). Should the assumption be made that students are predominantly accommodated from the six (6) universities of technology in South Africa it can be deduced that CUT has done well. This is based on the evidence that twenty percent (20%) of students accommodated are from CUT ( $4/20 = 20\%$ ), whereas a normal distribution between all the universities of technology ( $1/6 = 16,67\%$ ) would have implied less than what CUT had achieved. Experience has shown though that it is the exception when one employer accommodates students from every university of technology with only one such employer known to CUT. It was also determined, as indicated in Figure 6.4, that CUT students are mostly placed with smaller employers. The net result thus is that employers do have the capacity to accommodate more CUT students.

A further significant statistic is that on average two (2) CUT students were offered employment upon completion of WIL compared to the one (1) student employed who did not complete any WIL. This evidence clearly indicates how WIL has enhanced the

employability of students and that employers prefer to appoint students who have completed their WIL with them.

It is also important to note that on average two (2) out of four (4) students accommodated for WIL were employed in permanent positions at the employers where these students have completed their WIL. It can therefore be concluded that fifty percent (50%) of CUT students are employed at the employers where the students were placed for WIL and that it seems to be a recruitment method used by employers.

It was indicated in the introduction to this section that it was necessary to determine whether empirical evidence exists at CUT and substantiate the evidence found in the literature reviewed that WIL does enhance the employability of students. This vindication of the empirical evidence in literature at CUT provided the foundation to investigate further, how the contribution of WIL could be optimised to enhance the employability of CUT students.

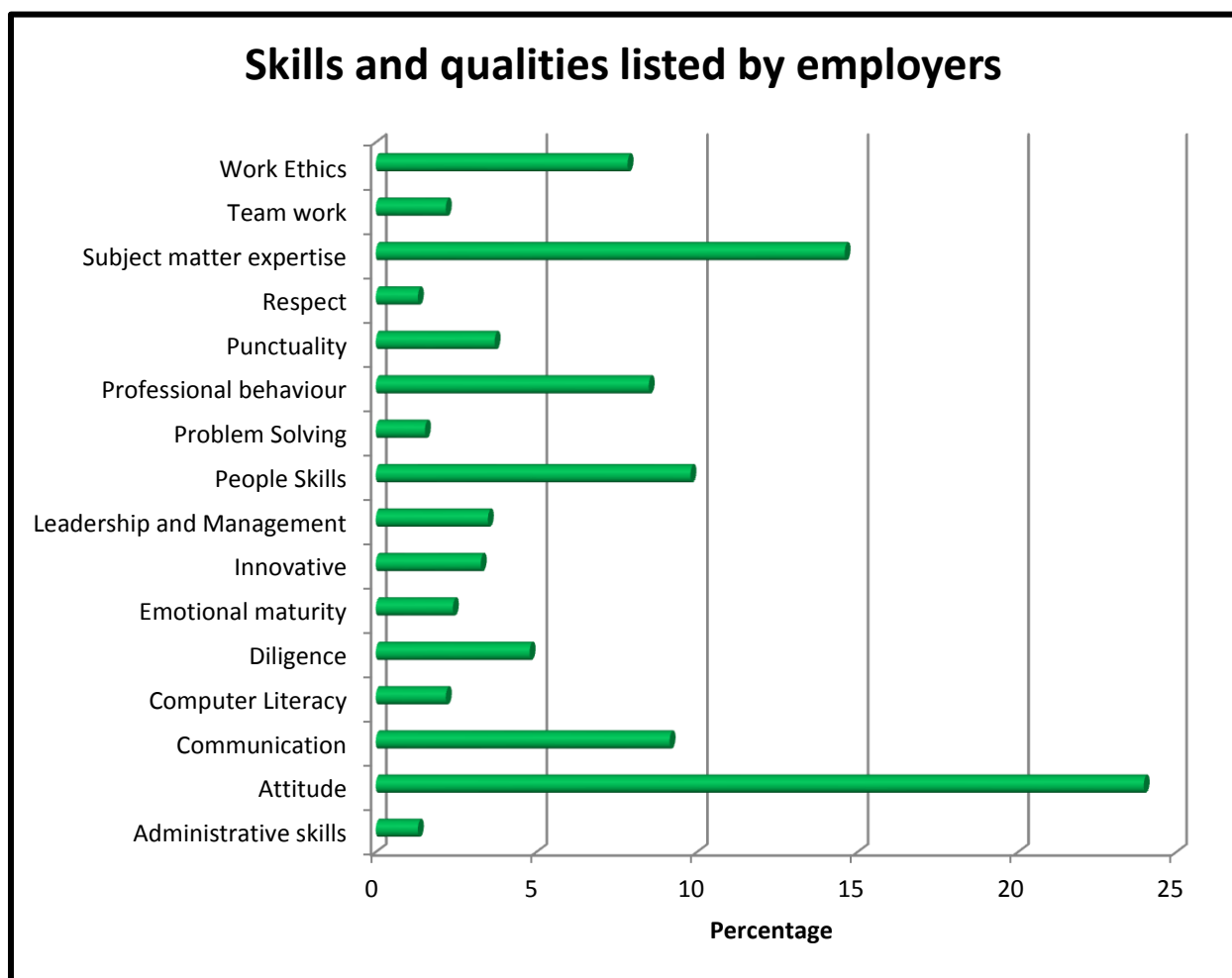
### **Section C – Skills and qualities of students and qualification structure**

In this section, the results are presented and analysed regarding the skills and qualities that employers indicated students should have when graduating from university to be appointed as an employee within their organisation. This includes employers' ratings of their own level of satisfaction with the actual skills and qualities that students placed with them have attained. Employers were also requested to select the one skill or quality that was the most important to them. Since WIL was included as a curriculum issue in the definition for WIL adopted for this study, employers were also requested whether it was necessary to include the skills and qualities identified by them as part of the curriculum as well as how it should be included. Employers were also given the opportunity to provide their ideal structure of a qualification to get the most out of WIL.

The rationale behind these questions was to determine which skills and qualities are needed by employers that will enhance the employability of students. The level of satisfaction of employers in this regard will be an indication of where possible gaps might be to address in terms of the students' mastering of these skills and qualities. The

single most important skill or quality indicated by employers will assist with the identification of which skill or quality to emphasise in preparing students for WIL and the workplace. Indications regarding the structure of the qualification will provide useful information in terms of how often, when and for how long students should be engaged with WIL to assist with the planning of how to structure the WIL component as part of the qualification. In this manner, it will also be possible to determine when employers are more likely to accommodate students for WIL.

The skills and qualities required by employers are firstly presented in Figure 6.7.



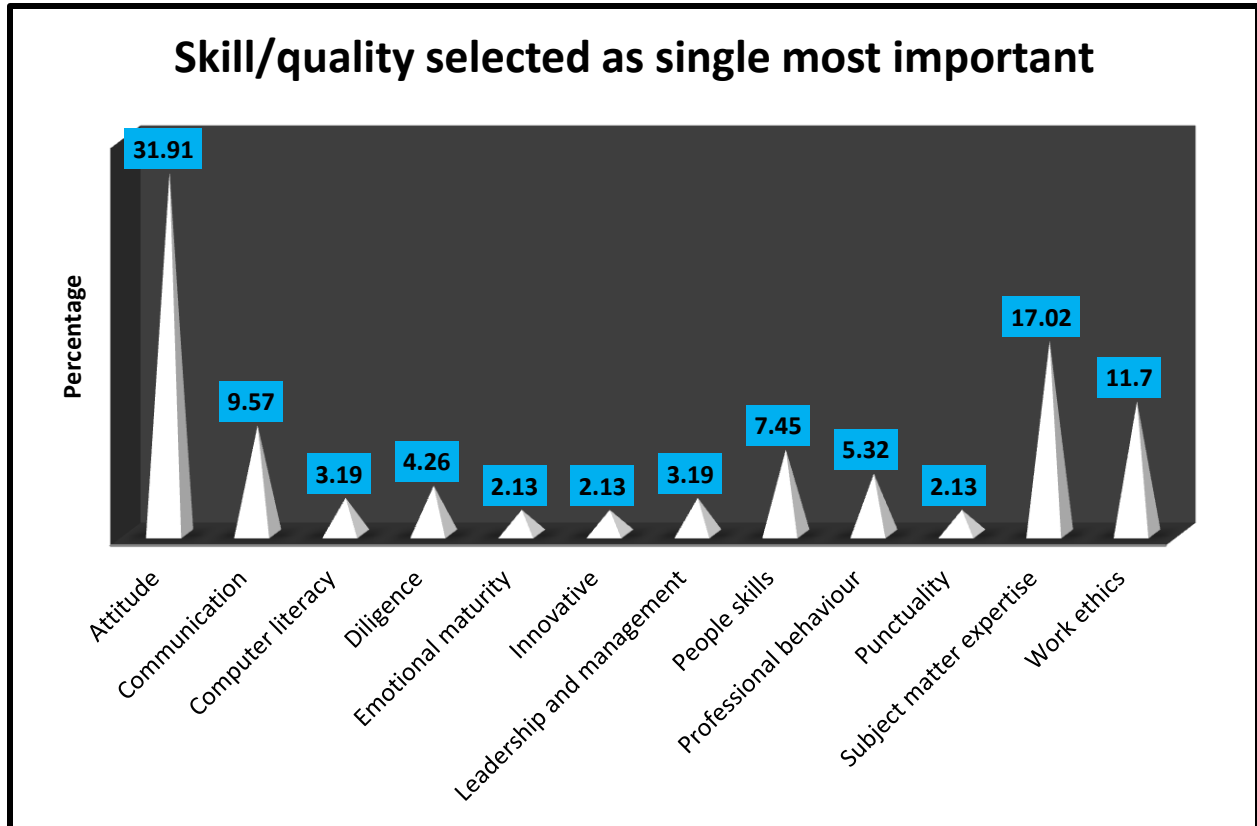
*Figure 6.7: Skills and qualities required by employers*

The top five (5) skills and qualities mostly sought after by employers in ranking order are attitude, subject matter expertise, people skills, communication and professional

behaviour. Attitude and subject matter expertise are clearly the most important quality and skill valued by employers. A conclusion to be drawn from this is that employers are first looking for someone with a good attitude. It is interesting to note that the most important quality for employers has nothing to do with academic performance or ability but rather an attribute that is within reach of every student. This statement is based on the assertion that attitude is a conscious decision that can be made. Students do not all have the same abilities or talents, but they can all decide how they are going to react to situations and be positive.

Also worth noting is that four (4) of the five (5) top skills has to do with the manner in which people conduct themselves, namely attitude, people skills, communication and professional behaviour. The manner in which students conduct themselves in the workplace therefore seems to be of the utmost importance and provides a clear indication of what to focus on with regard to the preparation of students. A graduate student with a positive attitude and exemplary conduct, coupled with a good degree of subject matter expertise therefore seems to be the ideal combination that employers are looking for.

Employers were also requested to select one skill or quality from the list of their top five (5) skills and qualities they regarded to be the single most important skill or quality. The one skill or quality selected by them as the most important is indicated in Figure 6.8.



*Figure 6.8: Skill or quality selected by employers as most important*

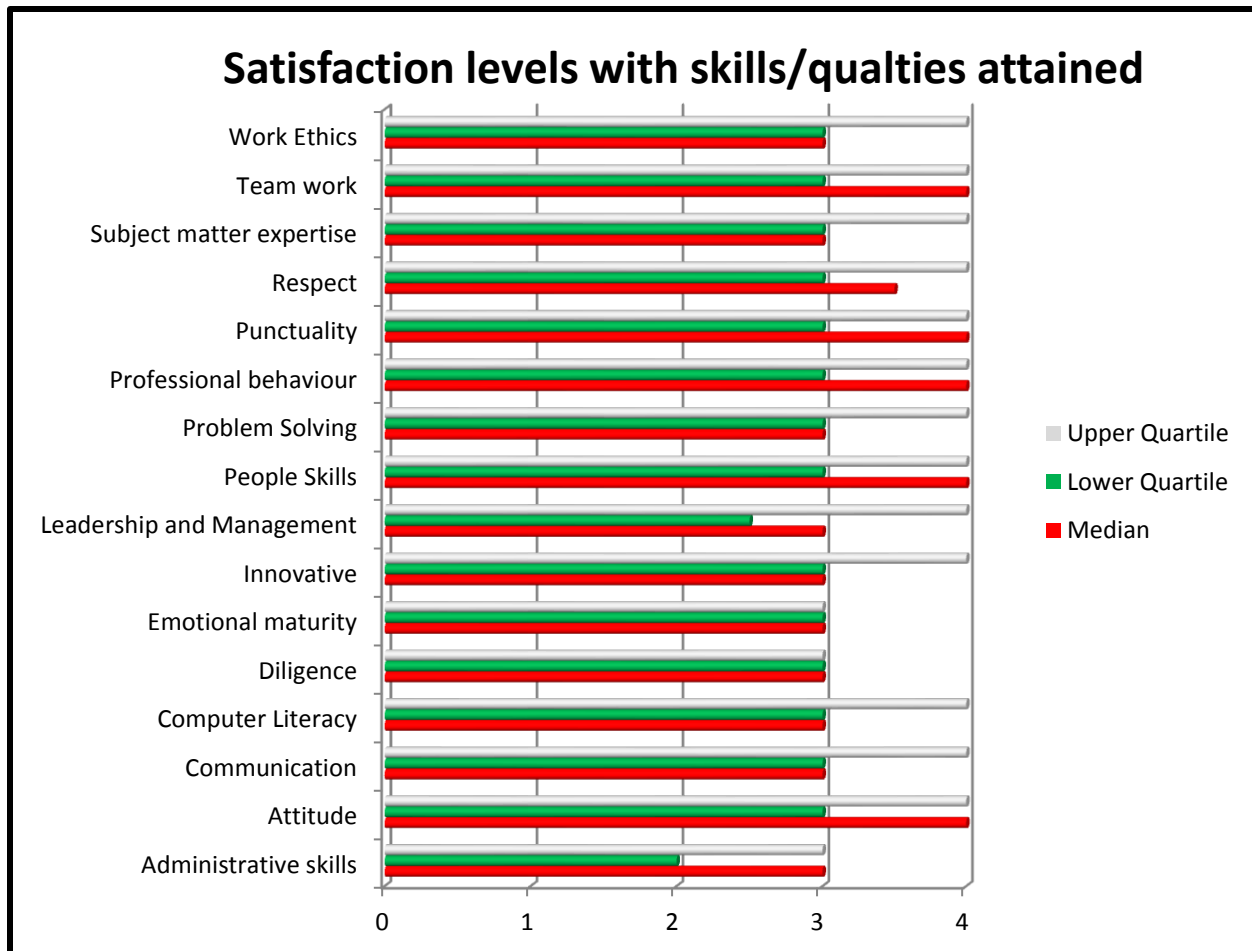
Attitude emerged to be the single most important quality selected by employers, as portrayed in Figure 6.8. This is a very clear indication of what employers regard to be the most important quality they look for, since attitude was also the quality the most sought after by employers from their top five (5) lists of skills and qualities in Figure 6.7. Subject matter expertise was the skill selected as the second most important, which also corresponds with what was indicated by employers in their list of skills and qualities. A comparison of the top ten (10) skills and qualities from both graphs is done in Table 6.2 to identify the ideal bucket of skills and qualities required by employers:

Table 6.2: Comparison of skills and qualities

List of top five skills and qualities (Figure 6.7)		List of single most important skills and qualities (Figure 6.8)	
Attitude	23.97	Attitude	31.91
Subject matter expertise	14.6	Subject matter expertise	17.02
People skills	9.8	Work ethics	11.7
Communication	9.15	Communication	9.57
Professional behaviour	8.5	People skills	7.45
Work ethics	7.84	Professional behaviour	5.32
Diligence	4.79	Diligence	4.26
Punctuality	3.7	Computer literacy	3.19
Leadership and management	3.49	Leadership and management	3.19
Innovative	3.27	Emotional maturity	2.13

A minimum percentage of five percent (5%) was applied to the comparison above as an objective measure to be able to determine the top skills and qualities from both lists. The ideal bucket of skills and qualities is therefore attitude, subject matter expertise, work ethics, communication, people skills and professional behaviour. Since work ethics can also be regarded as a manner of conduct, the description of the ideal student above does not have to be altered.

How close CUT students are to the ideal student described above can be assessed in terms of the results presented in Figure 6.9.



*Figure 6.9: Employers' ratings of skills and qualities attained by students*

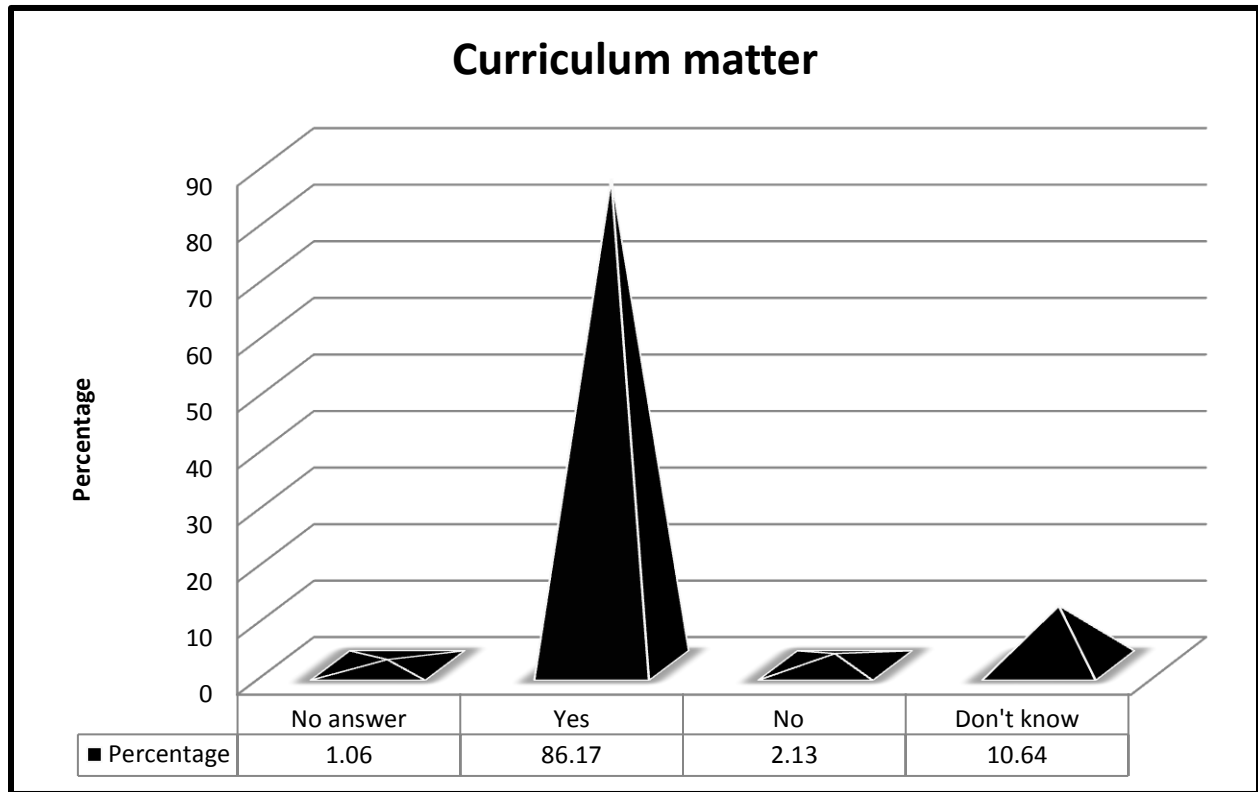
Employers had to rate their level of satisfaction with the actual skills and qualities attained by students on a 5-point scale where 1 = poor; 2 = below average; 3 = average; 4 = good and 5 = excellent. The median scores in Figure 6.8 indicate the following rating with regard to the five skills and qualities most sought after by employers: attitude: 4; subject matter expertise: 3; work ethics: 3; people skills: 4; communication: 3 and professional behaviour: 4.

These ratings therefore suggest that CUT students are in a good, although not perfect, position with regard to their attitude, people skills and professional behaviour but that their work ethics, communication and subject matter expertise need improvement. As a whole there seems to be no cause for alarm in meeting the ideal student's profile, but



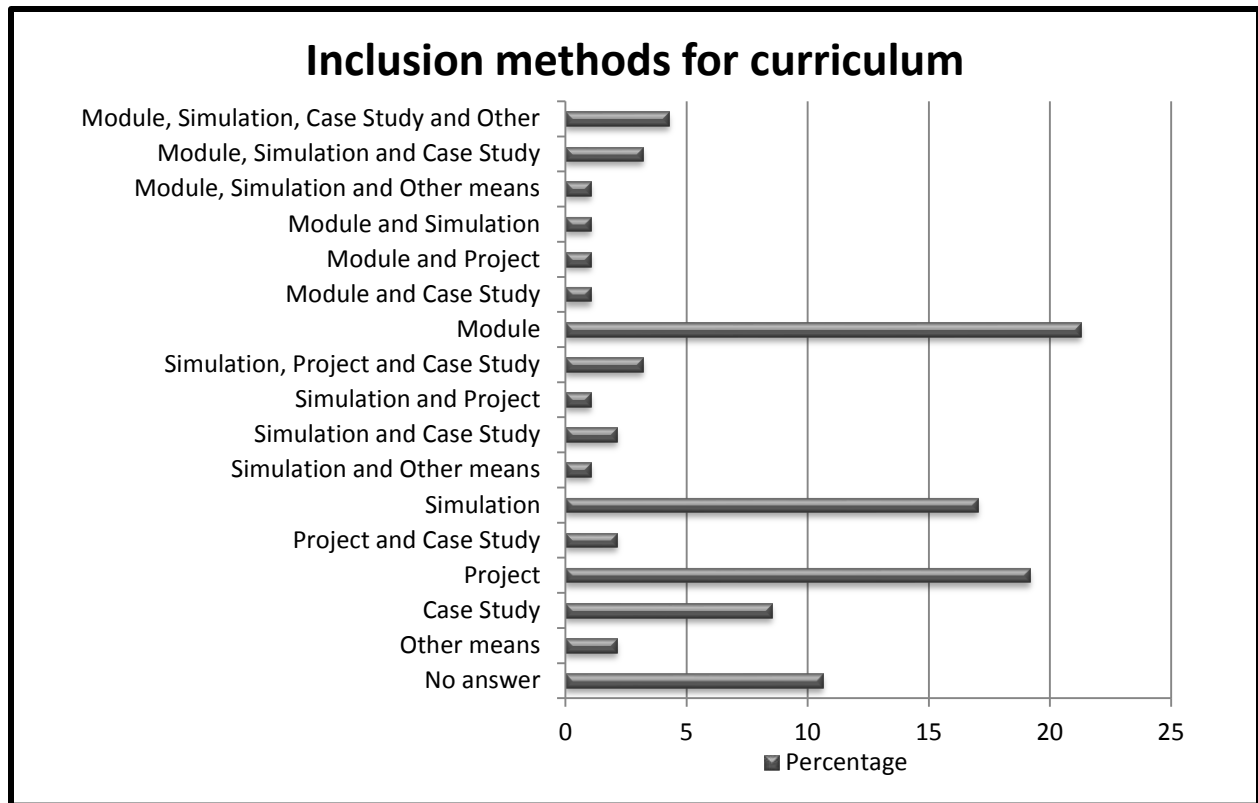
that there is room for improvement. It will also be interesting to see whether these ratings vary when the analysis per programme is done.

Employers' views were also sought on whether these skills and qualities should be included in the curriculum. Overwhelming support was shown for including these skills and qualities as a curriculum matter as indicated in Figure 6.10.



*Figure 6.10: Inclusion of skills and qualities identified in the curriculum*

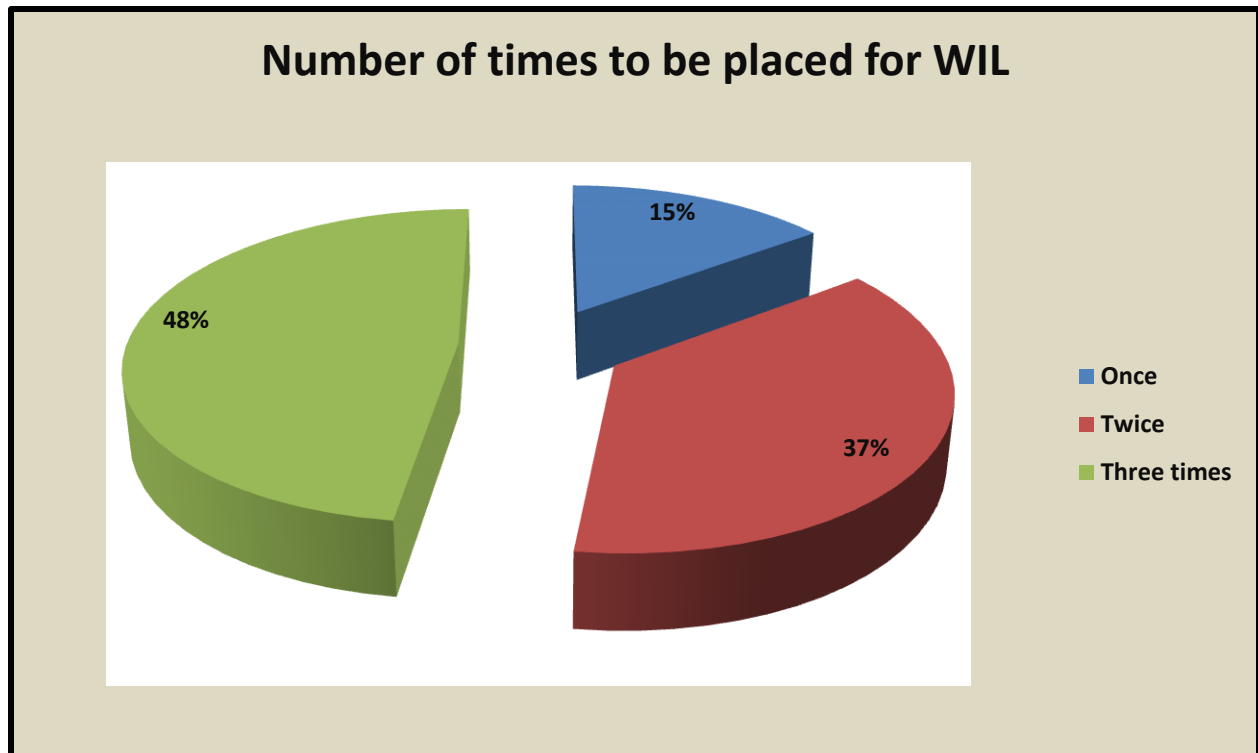
Options were also provided for various methods that employers could select to determine how these skills and qualities should be included in the curriculum. The methods selected are shown in Figure 6.11.



*Figure 6.11: Methods for including skills and qualities in the curriculum*

Interesting to note from Figure 6.11 is that single methods such as a module, project, simulation and case study were preferred to any combinations thereof, for example, such as a module, case and simulation. Whether this is the case for every faculty and programme will be determined when the analysis is further refined to these levels.

In continuing the quest to determine how the contribution of WIL to enhance the employability of students can be optimised, employers were given the opportunity to provide their ideal structure of a qualification to get the most out of WIL. Due to big differences in the professions the qualifications are aimed at, such as education, engineering, management as well as health and environmental sciences, it was expected that these indications would vary between faculties and qualifications. The ideal structure from employers' point of view can be derived from their suggestions as indicated in Figures 6.12–6.15.



*Figure 6.12: The number of times students should be placed over the length of a qualification*

A once-off placement for WIL was deemed not enough by most employers. Students should therefore be placed at least twice, but preferably three (3) times while studying towards a qualification.

The question regarding the timing of the placement aimed to determine during which year or years of study students should be placed for WIL. These results are shown in Figure 6.13.

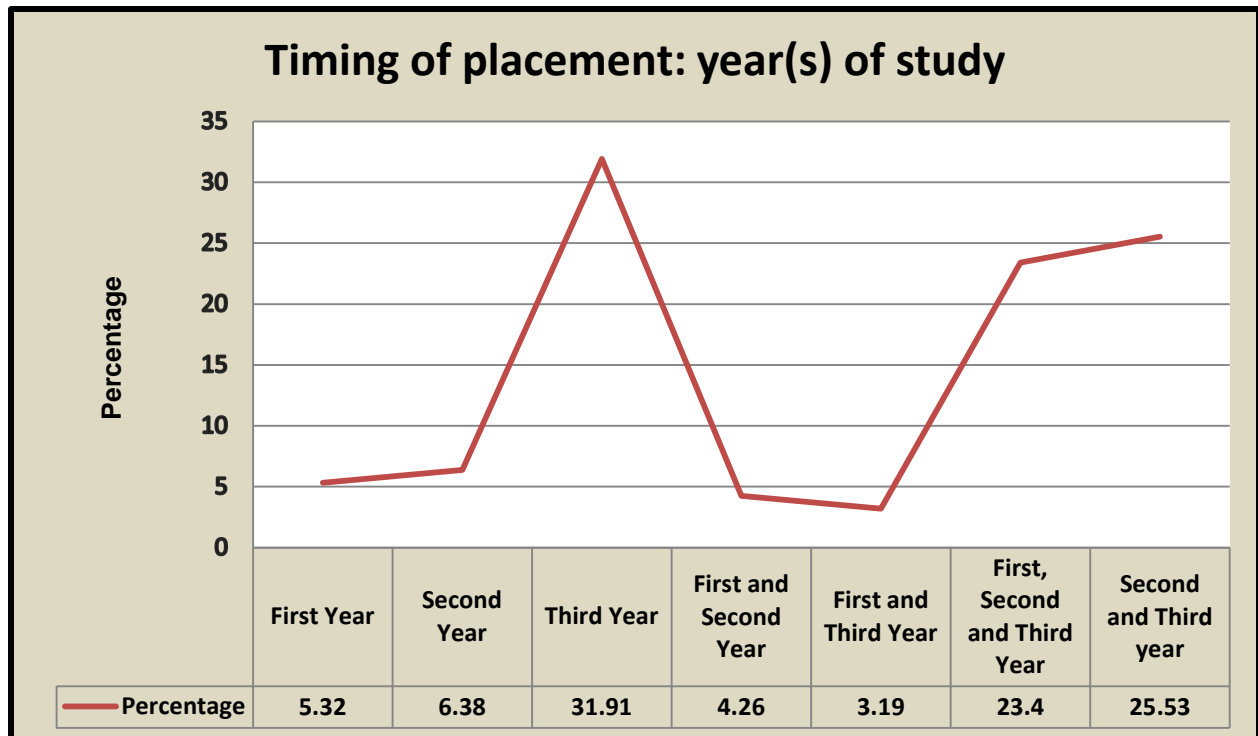
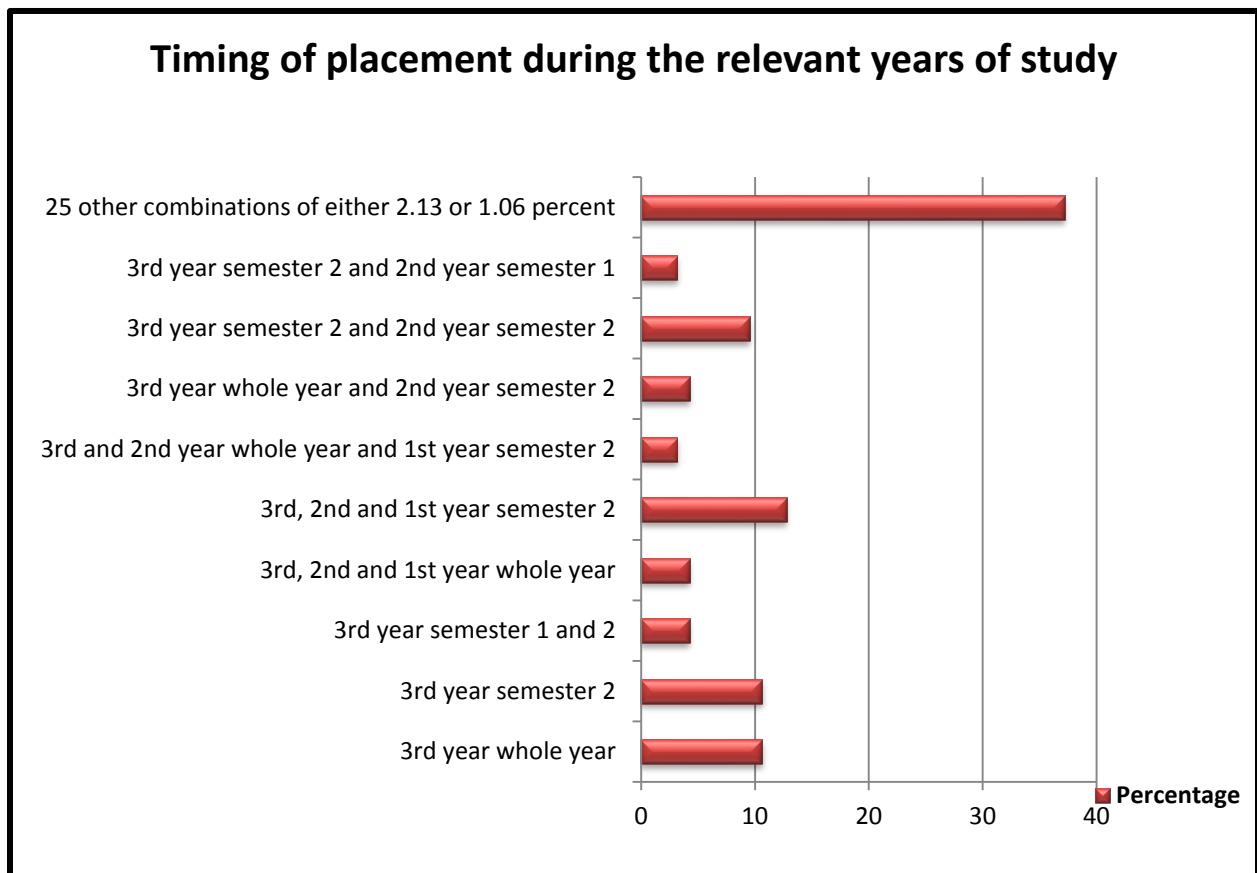


Figure 6.13: Placements during relevant year(s) of study

The third year of study is the preferred time of placement. In terms of what has already been learned in respect of the skills and qualities required by employers this could be due to the expectations that students would have more subject matter expertise during their third year, are supposedly more mature and hence more inclined towards displaying the type of conduct required. However, the placement of students during their second and third year as well as during all three years of study is more aligned with the preferences of employers that students should be placed at least twice, but preferably three (3) times, as indicated above. As a result, the following conclusions are made:

- The third year of study (as the preferred time of placement) is the most significant year of placement.
- Students should be placed during the second and third year when placed twice.
- The ideal combination seems to be placement during the first, second and third year since this combination is aligned with the preference that students should preferably be placed three (3) times.

In addition to knowing how many times and which relevant years of study students should be placed, it was also necessary to determine when students should be placed during the relevant years of study. Employers were provided with three options per year of study, namely semester 1, semester 2 and a whole year for every year and they could select more than one combination. Their choices are indicated in Figure 6.14.



*Figure 6.14: Timing of placements in the relevant years of study selected*

Thirty-four (34) different combinations selected by employers, of which twenty-five (25) combinations received marginal support of either 2,13% or 1,06% as indicated in Figure 6.14. Since the aim is to select the ideal combination for CUT, only combinations that received larger support are revealed in Figure 6.14. Out of these combinations left, four (4) combinations are preferred in general by employers, namely (in ranking order):

- The second semester of the first, second and third year (12,77%)

- The second semester of the third year (10,64%)
- The whole year during the third year (10,64%)
- The second semester of the second and third year (9,57%)

The second semester of the first, second and third year has been revealed as the combination most sought after by employers above. It is also well aligned with the ideal combination determined above since it corresponds with students placed at least three (3) times during the first, second and third year. The ideal combination could therefore be further refined to be the placement of students during the second semester of the first, second and third year of study.

The final question to be answered, though, is how long students should be placed with employers. As was the case in determining when students should be placed during the relevant years of study, the number of combinations in this case was many (30 in total) and had to be whittled down. As shown in Figure 6.15 below, the combinations that received the most support (more than 5%) were the following:

- Three (3) months during the third year (14%).
- Three (3) months during the first, second and third year (14%).
- One (1) year during the third year (7%).
- Six (6) months during the second and third year (7%).
- Three (3) months during the first year and six (6) months during the second and third year (6%).

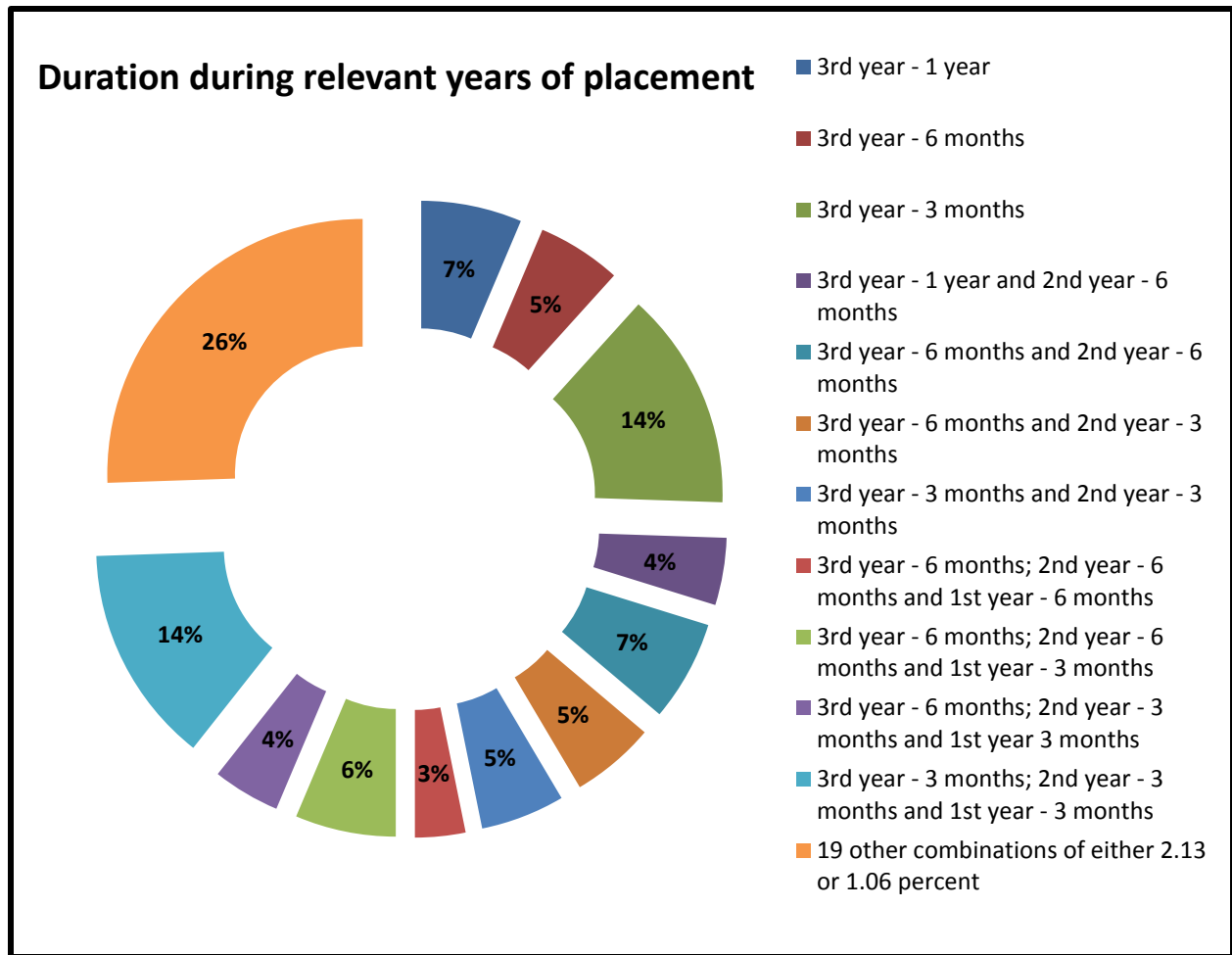


Figure 6.15: Duration of placement during the relevant years of placement

In terms of the ideal combination determined thus far, the two (2) combinations that are best aligned in this regard are the placement of students for three (3) months during the first, second and third year (14%) and three (3) months during the first year and six (6) months during the second and third year (6%). A shorter duration of three (3) months during every year of study is thus preferred.

The ideal combination derived from the interpretation of the results is therefore the placement of students for WIL for three (3) months during the second semester of the first, second and third year of study.

The statistics analysed thus far provide valuable information in respect of the type of employers involved with WIL and where they are located as well as the importance they

attach to WIL, together with their records of accomplishment and capacity with regard to the hosting of WIL students. It has also been proven empirically that WIL does enhance the employability of CUT students together with indicators regarding the ideal bucket of skills and qualities required, how these skills and qualities should be included in the curriculum and how qualifications should be structured to get the most out of WIL.

More information is required, though, to answer the main research question in determining how the contribution of WIL can be optimised towards the employability of students in one comprehensive strategy. This assertion is based on the determination in the literature review that WIL also includes a quality cycle (Forbes 2008:12). The elements of the WIL quality cycle therefore had to be investigated as well to determine how the contribution of WIL can be optimised.

#### **Section D – The WIL quality cycle**

The WIL quality cycle contains the following elements: preparation of students; preparation of employers; placement process; monitoring by the university; mentoring and supervision by employers; assessment by the university and employers; debriefing. The analysis of the results received with regard to each element of the WIL quality cycle is presented below.

##### **(a) Preparation of students**

Employers were asked what CUT should focus on regarding the preparation of students on campus before they are placed for WIL. A list of topics was provided to be rated as essential, useful or not necessary. An indication of the most important topic was also requested to assist in determining the most important topic(s).

The results of responses received in respect of the fifteen (15) topics provided are presented in Figure 6.16. The numerical values were determined by applying a rating scale of: essential = 100; useful = 50 and not necessary = 0 points. Employers' selection of the most important topic is portrayed in Figure 6. 17.



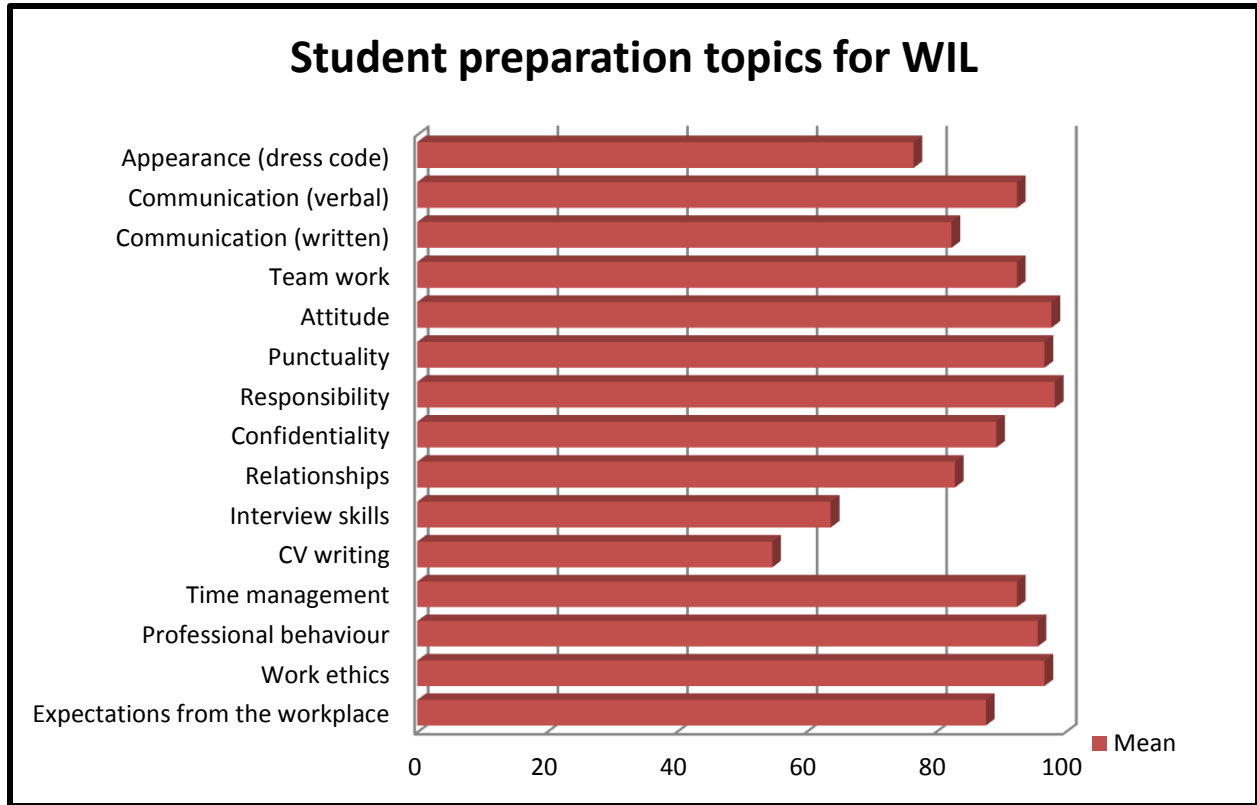


Figure 6.16: Employers' rating of student preparation topics for WIL

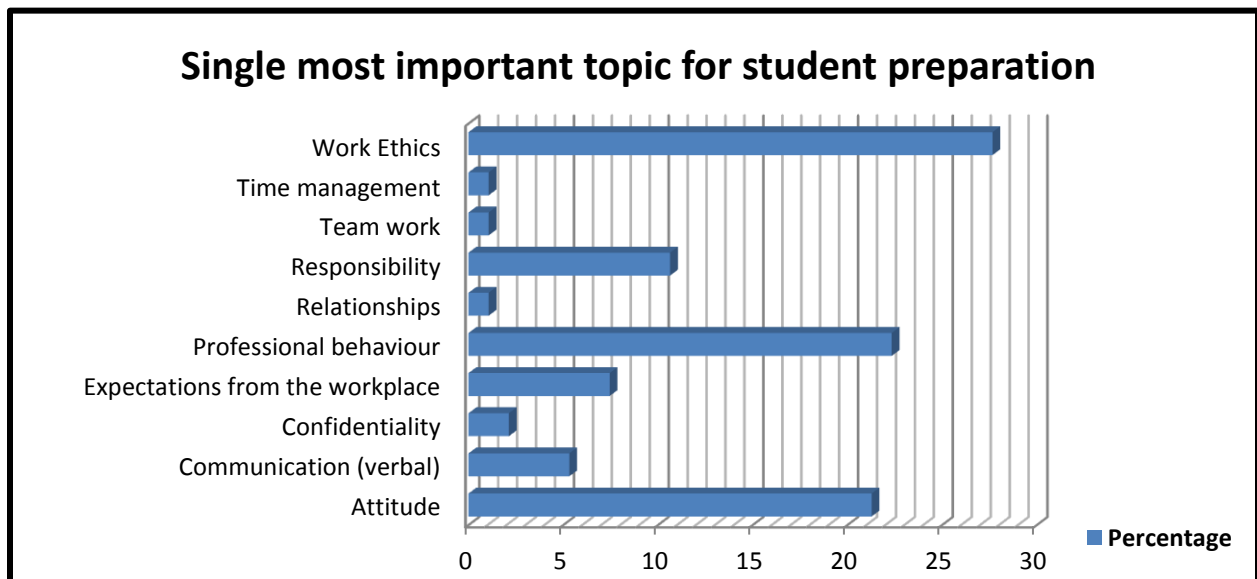


Figure 6.17: Topic selected by employers as most important

A comparison of the top ten (10) topics is provided in Table 6.3.

*Table 6.3: Comparison of student preparation topics for WIL*

List of topics selected Figure 6.16	Mean	Most important topic selected Figure 6.17	Percentage
Responsibility	98.4	Work Ethics	27.66
Attitude	97.87	Professional behaviour	22.34
Work ethics	96.81	Attitude	21.28
Punctuality	96.81	Responsibility	10.64
Professional behaviour	95.74	Expectations from the workplace	7.45
Time management	92.55	Communication (verbal)	5.32
Team work	92.55	Confidentiality	2.13
Communication (verbal)	92.55	Relationships	1.06
Confidentiality	89.36	Team work	1.06
Expectations from the workplace	87.77	Time management	1.06

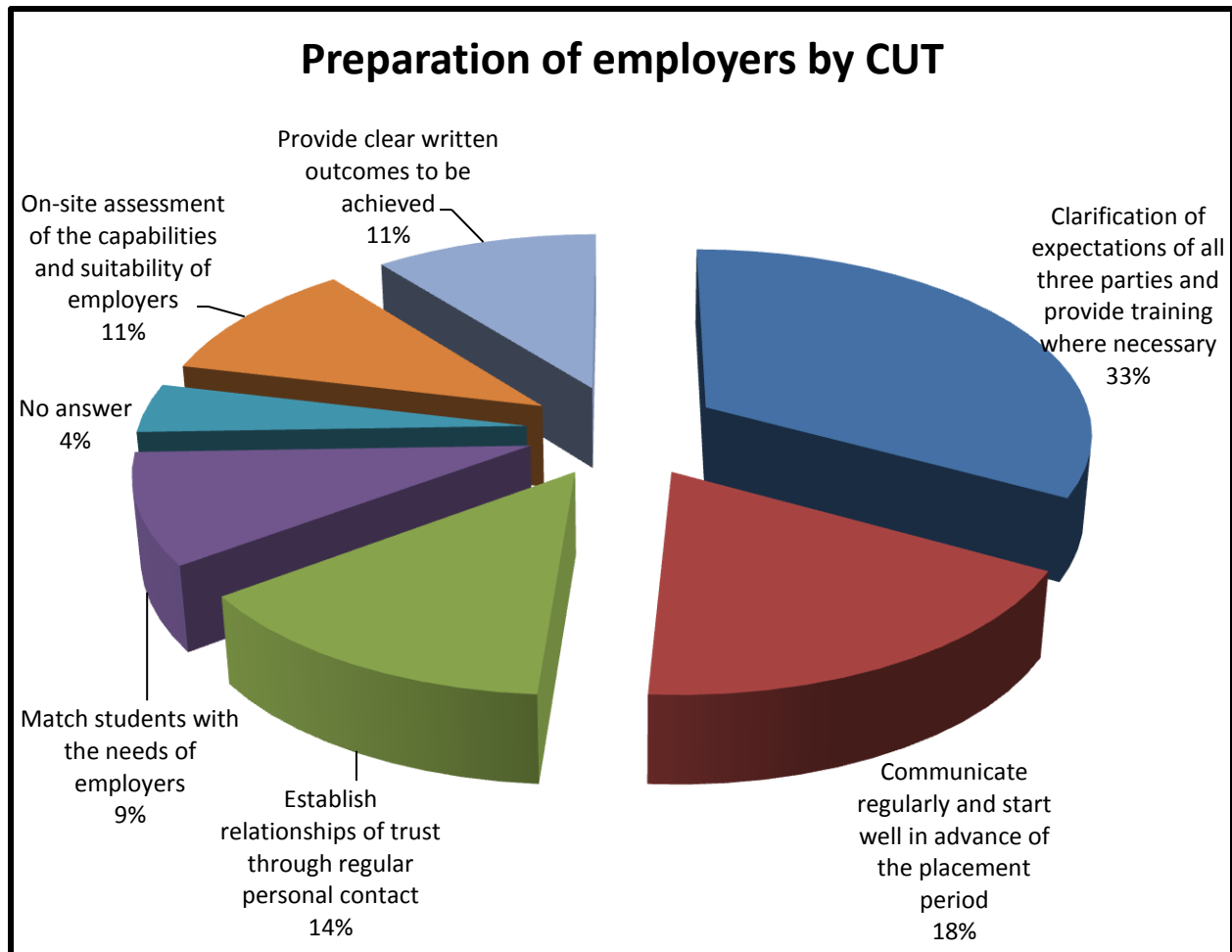
In the analysis of the skills and qualities done previously (Table 6.2), employers had to provide a list and then select from their own list the most important skill or quality. In this case, they had to select from a predetermined list and then choose the most important topic from the predetermined list. Due to the deviation in method used, percentages could not be determined for the first column in Table 6.3. The same 5% principle was applied as in Table 6.3 and topics with a score of 5% and higher selected. The importance thereof is supplemented from the column indicating the mean scores.

The most important topics to include in the preparation of students for WIL are work ethics, professional behaviour, attitude, responsibility, expectations from the workplace and verbal communication. Of particular importance are work ethics, professional behaviour, responsibility, attitude and verbal communication when compared to the first column of mean scores. It is also important to note that these topics are almost an exact copy of the ideal bucket of skills and qualities required by employers since the only omission is subject matter expertise, which was not included in the list of topics provided in this case.

(b) Preparation of employers

Employers need to be prepared and/or approved by CUT for the placement of students for WIL and they were asked to indicate what the single most important thing is that CUT should do with employers in this regard. Employers were also given the opportunity to provide information with regard to what could additionally be done with the preparation of employers that will enhance the employability of students.

The responses received to both questions were qualitative by nature and were hence analysed in terms of the qualitative analysis approach explained at the beginning of the chapter. The responses received were captured verbatim on a matrix and analysed to identify commonalities and trends. The commonalities and trends were then labelled as themes and each response placed under a relevant theme, which enabled the quantitative determination of the significance of each theme. Interesting to note is that no additional themes had emerged from what could additionally be done in comparison with the themes identified in respect of the single most important thing that can be done with employers. Six (6) themes could be identified clearly, as described in Figure 6.18.



*Figure 6.18: Issues to be addressed in preparing employers for WIL*

The most important issue seem to be the clarification of expectations of all three parties concerned with training provided to employers where necessary. The importance of communication was again highlighted, with employers indicating that they want this process to happen regularly and needs to be started well in advance of the commencement of the placement period. The provision of clear written outcomes to be achieved further accentuated the importance of communication. The need for a relationship of trust to be established through regular contact provide additional evidence that WIL is indeed about a three-way partnership between the university, student and employer as determined in chapter 2. WIL should therefore also not be regarded as a distance learning exercise, since this would make adherence to the

needs of on-site assessments of the capabilities and suitability of employers together with the matching of students to the needs of employers impossible.

In summary, what should be done with employers to prepare them for WIL, two (2) significant factors have emerged that encapsulate the needs of employers as described above. It is about the importance of regular and efficient communication as well as a relationship of trust built on personal contact to clarify and attend to the needs and expectations of employers.

### (c) Placement process

The placement of students with participating employers can be done in various ways. A list of various methods that can be used was provided. Employers were requested to rate each method as *preferred*, *useful* or *not necessary* and could indicate what could be done additionally with the placement of students that would enhance their employability. The numerical values were determined by applying a rating scale of: preferred = 100; useful = 50 and not necessary = 0 points. Employers' preferences for methods are shown in Table 6.4.

*Table 6.4: Placement methods preferred by employers*

Placement methods	Mean
Placements to be handled by one representative from CUT	76.97
CV, cover letter and interview together with a recommendation from CUT	74.72
Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer	58.82
CV, cover letter and recommendation from CUT	56.4
CV and interview	48.24
CV, cover letter and interview	45.4
CV and recommendation from CUT	42.26
Students to approach employers on their own with a follow-up done by CUT	28.41

The pertinent issues to emerge from the responses received are the following:

- Employers want to deal with one representative from CUT regarding placement and are generally not in favour of students approaching them regarding placement.
- A CV, cover letter and interview together with a recommendation from CUT is the preferred method to introduce students for placement to employers.
- In the absence of CVs and interviews, students can also be allocated by CUT to employers based on CUT's knowledge of the students and employer.

Additional suggestions only provided more details in terms of the placement methods selected. Examples are provided below and quoted verbatim:

- “I would prefer a one-step service i.e. Obtain CV results from CUT WIL (as per our requirements), obtain invoices and results also from them and not having to contact class.”
- “Draw up a database with scores and ratings based on current and previous employers' assessments of the student. This will place CUT and future employers in a better position to students where they will have a good organisational fit.”

(d) Monitoring by the university

Students placed with employers need to be monitored by CUT to determine the progress made by students in terms of the training required as well as to determine employers' satisfaction and to elicit comment on the students' progress. A list of monitoring methods was provided which employers had to rate as essential, useful or not necessary in terms of importance as well as either weekly, monthly, quarterly or once per semester in respect of the frequency of contact required. The numerical values were determined by applying a rating scale of: essential = 100; useful = 50 and not necessary = 0 points. Employers also had to select the method they regard as most

important. The analysis regarding the importance attached to the various monitoring methods are indicated in Figure 6.19.

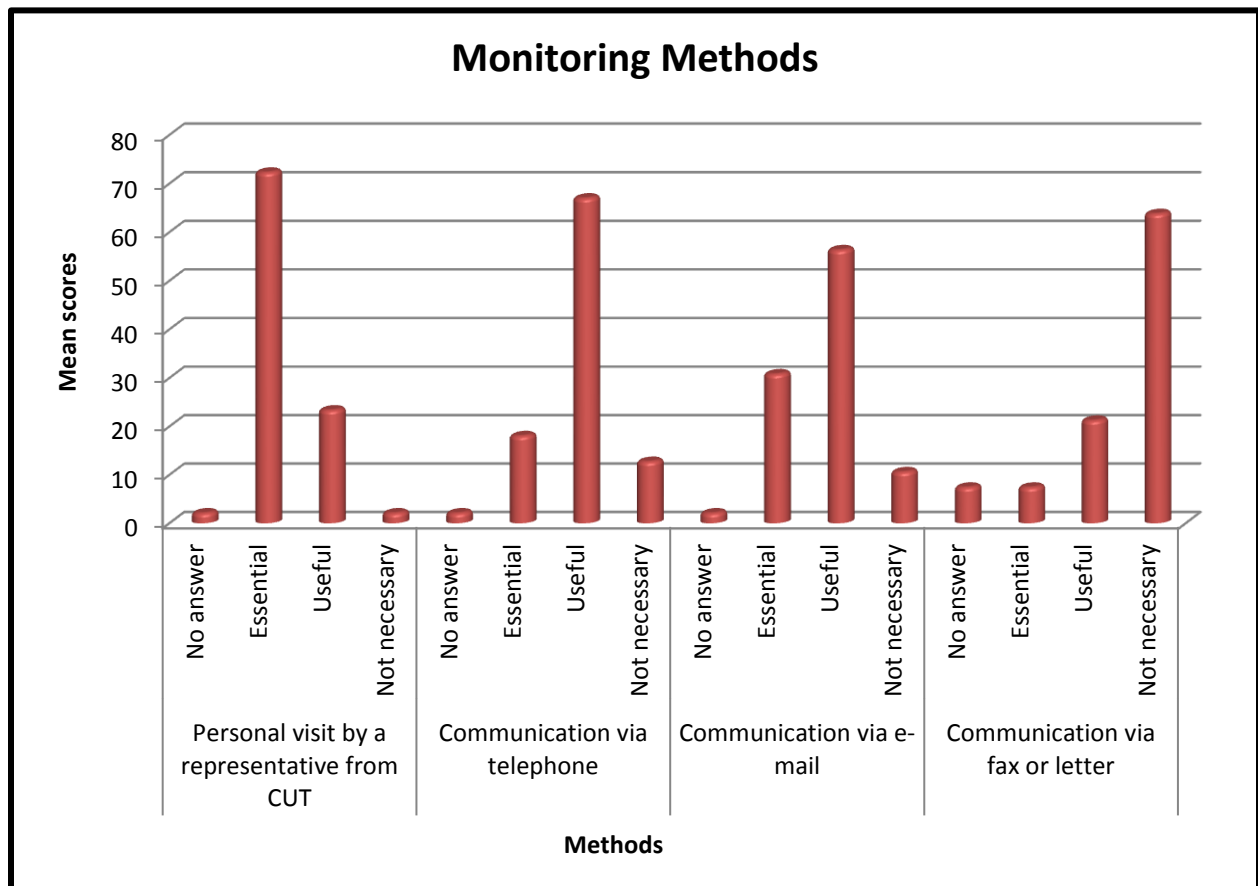
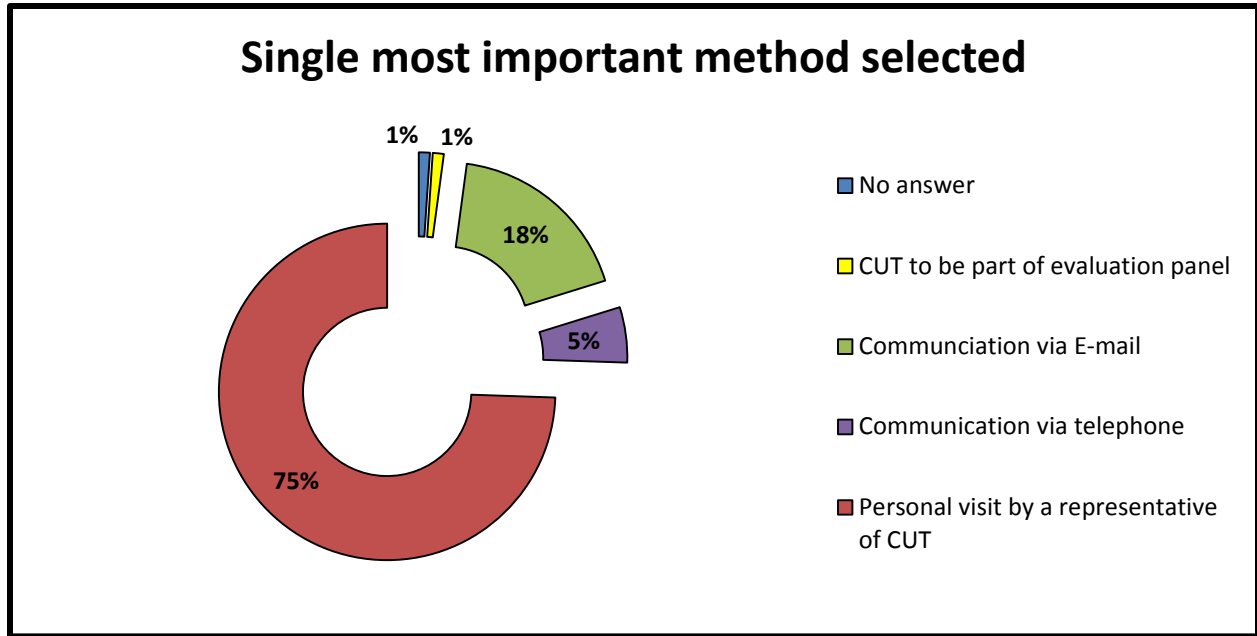


Figure 6.19: Importance of monitoring methods

The monitoring method indicated by employers as essential is a personal visit by a representative from CUT while communication via telephone or e-mail proved to be more useful than essential. The results of the method selected by employers as the most important in Figure 6.20 below will be analysed first before any further conclusions are drawn.



*Figure 6.20: Monitoring method selected as most important*

A personal visit by a representative from CUT was confirmed to be the most important monitoring method based on the results presented in Figure 6.20. This result, together with the degree of importance attached to communication via e-mail, correspond with what was determined as the two central issues regarding the preparation of employers, namely regular and efficient communication as well as a relationship of trust built on regular and personal contact. Having CUT as part of the evaluation panel was the only other suggestion received.

The frequency of contact required with regard to monitoring is shown in Figure 6.21. As indicated above, communication via fax or letter is regarded as unnecessary, which is most probably an indication that these forms of communication have almost become irrelevant. It is important to note though what is required in respect of personal visits by a representative from CUT as the most important method. It is clear that employers require personal contact on at least a quarterly or semester basis. More light will most probably be shed on the contact required per week or month when the analysis per faculty and qualification is done.



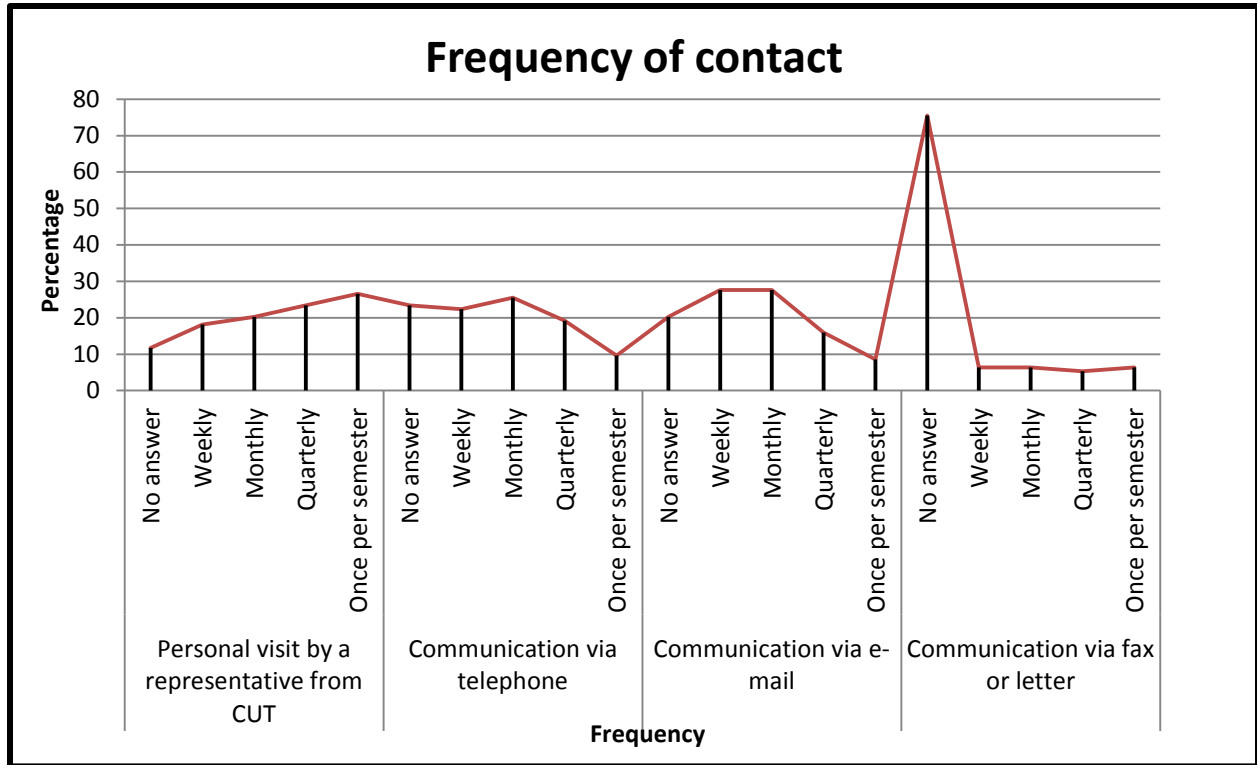
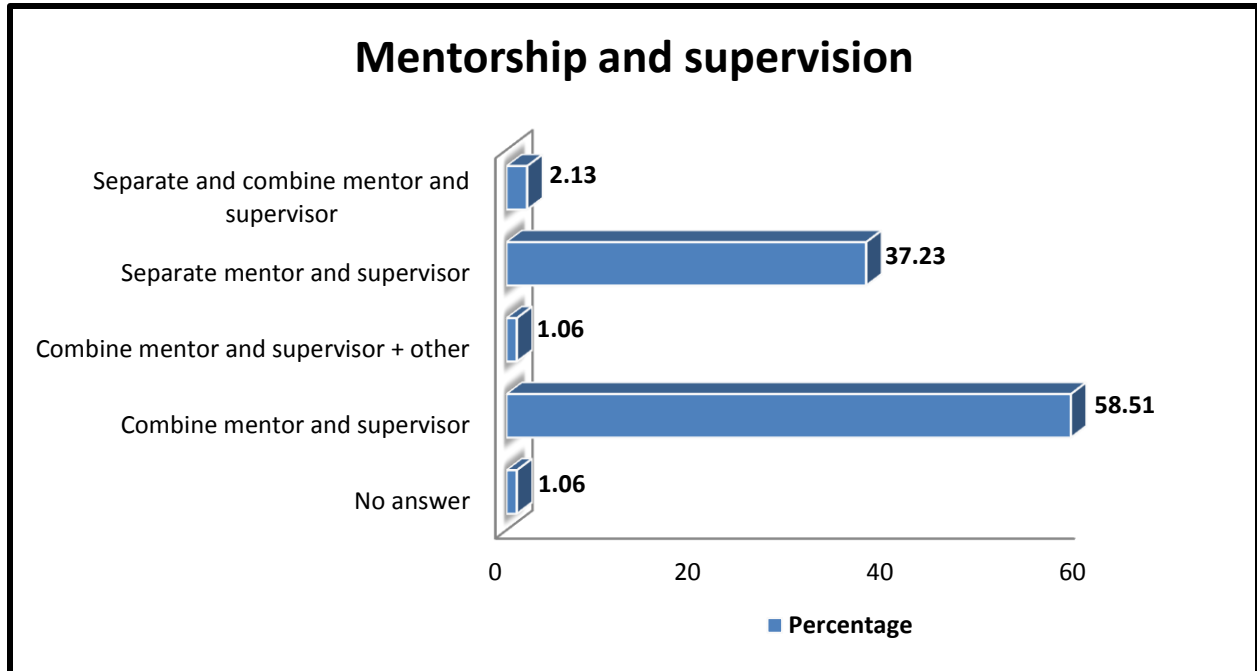


Figure 6.21: Frequency of contact required by employers

(e) Mentoring and supervision by employers

It was indicated on the questionnaire that mentoring is generally understood to be the passing on of wisdom and knowledge by a mature and experienced person to a younger and less experienced individual. Words typically associated with mentoring include *lead, guide, coach, advise, teach* and *counsel*. Supervision, by contrast, refers to the overseeing of the performance of another. Ideally, a student will have both a mentor and supervisor(s), although both roles could be fulfilled by one person.

Employers were asked how the functions of mentorship and supervision should be done and how to enhance these functions from a predetermined list. No significant responses were received on what can additionally be done with mentorship and supervision to enhance the employability of students. The combinations of responses received regarding how the functions of mentorship and supervision should be done are indicated in Figure 6.22.

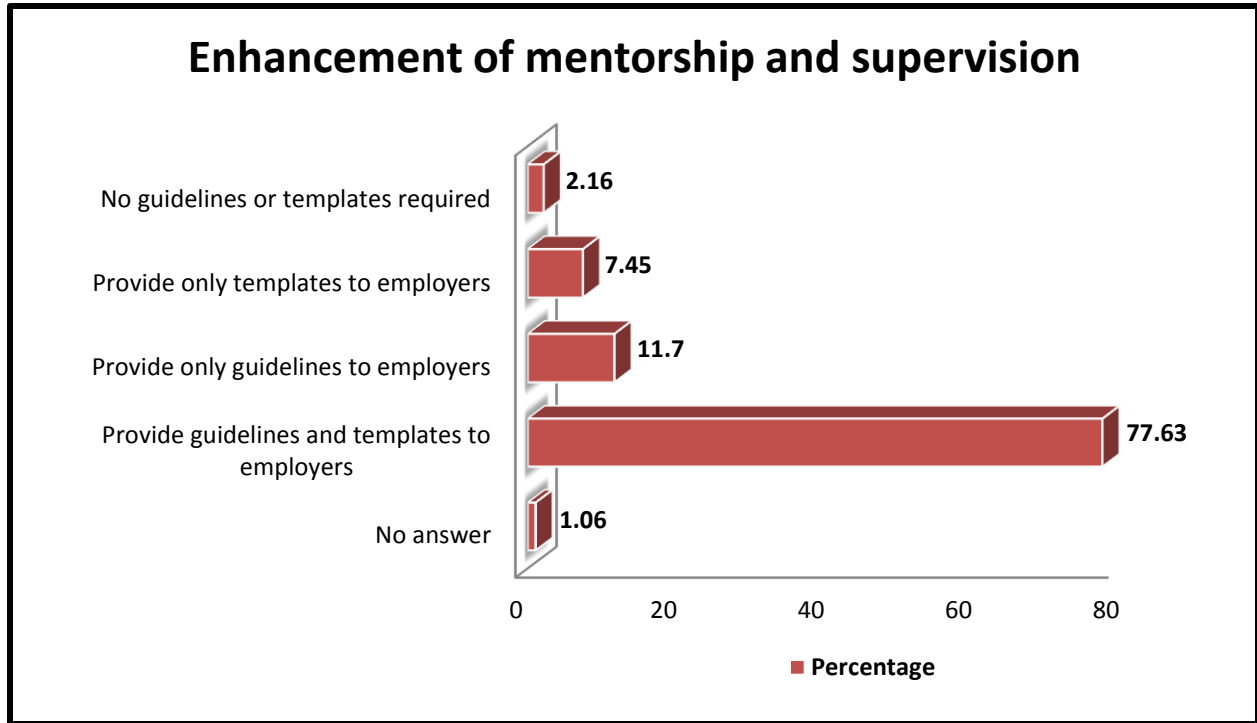


*Figure 6.22: Combinations of mentorship and supervision indicated by employers*

Combining mentorship and supervision is the preferred method based on the results received. The reasons for the preference in this regard is based on explanations received, quoted verbatim as follows:

- “Not enough staff to be done otherwise.”
- “Better control and efficiency of processes.”
- “Combining both would ensure that there's a 360 degree feedback and action planning or the students to progress and address challenges or areas of improvement.”

The choices in terms of how mentorship and supervision can be enhanced are indicated in Figure 6.23.



*Figure 6.23: Methods to enhance the functions of mentorship and supervision*

Employers were of the opinion that they need to be provided with both guidelines and templates to assist with mentorship and supervision. This opinion was largely based on explanations like the following, quoted verbatim:

- “Aids objectivity and consistency in standard of application.”
- “Enhance ability to mentor and supervise and enhances consistency.”
- “Ensures effective implementation and application.”

In summary, it can be stated that combining mentorship and supervision is the preferred method, which will be enhanced by providing employers with both guidelines and templates to assist with mentorship and supervision.

#### (f) Assessment by the university and employers

A list of assessment methods was provided from which employers had to rate these methods as essential, useful or not necessary. An indication of the frequency of assessment was also requested as weekly, monthly, quarterly or once per semester. A

selection also had to be made in terms of which assessment method employers regard to be the most important.

The results presented in Figure 6.24 show that a practical demonstration is the assessment method regarded by employers as the most essential. This is followed by an assessment in the workplace by a CUT representative and a written report, which have both received an essential rating in excess of sixty percent (>60%). This result is confirmed by exactly the same order of preference presented in Figure 6.25 in respect of the selection of employers of an assessment method they regard as the most important.

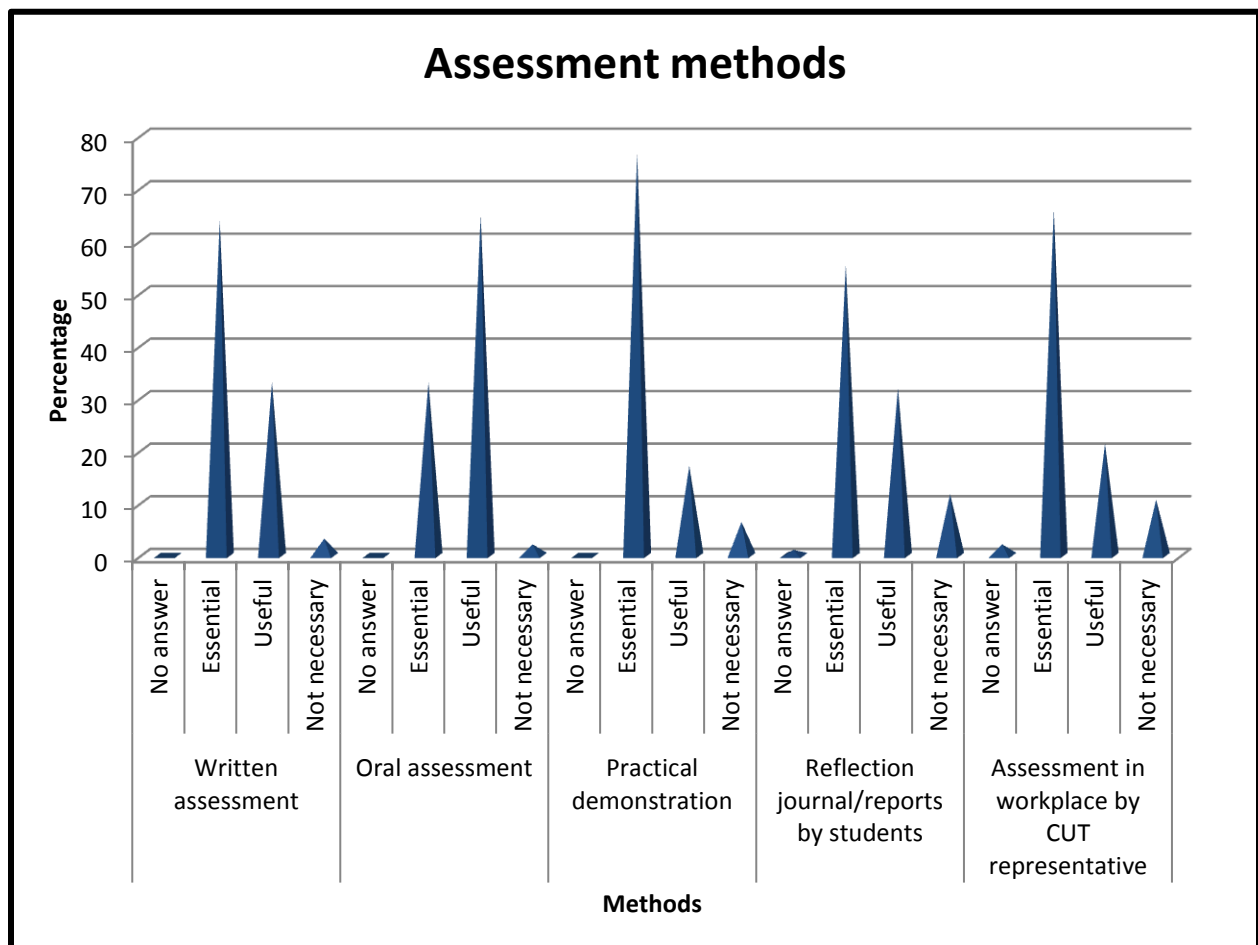


Figure 6.24: Assessment methods regarded by employers as essential

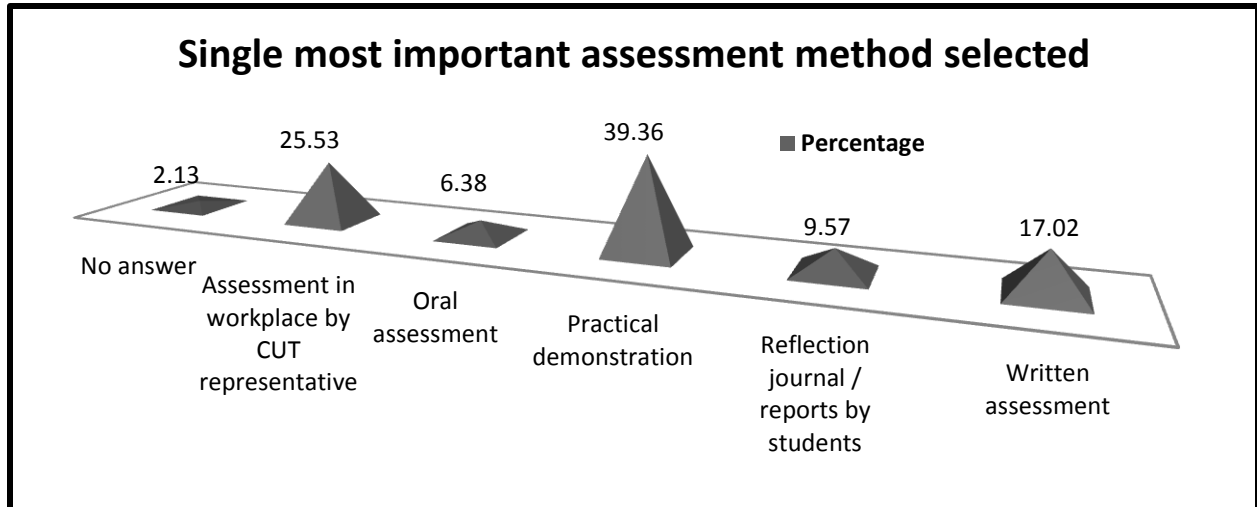


Figure 6.25: Assessment method selected as the most important

Preferences in terms of the frequency of assessment required by employers are shown in Figure 6.26.

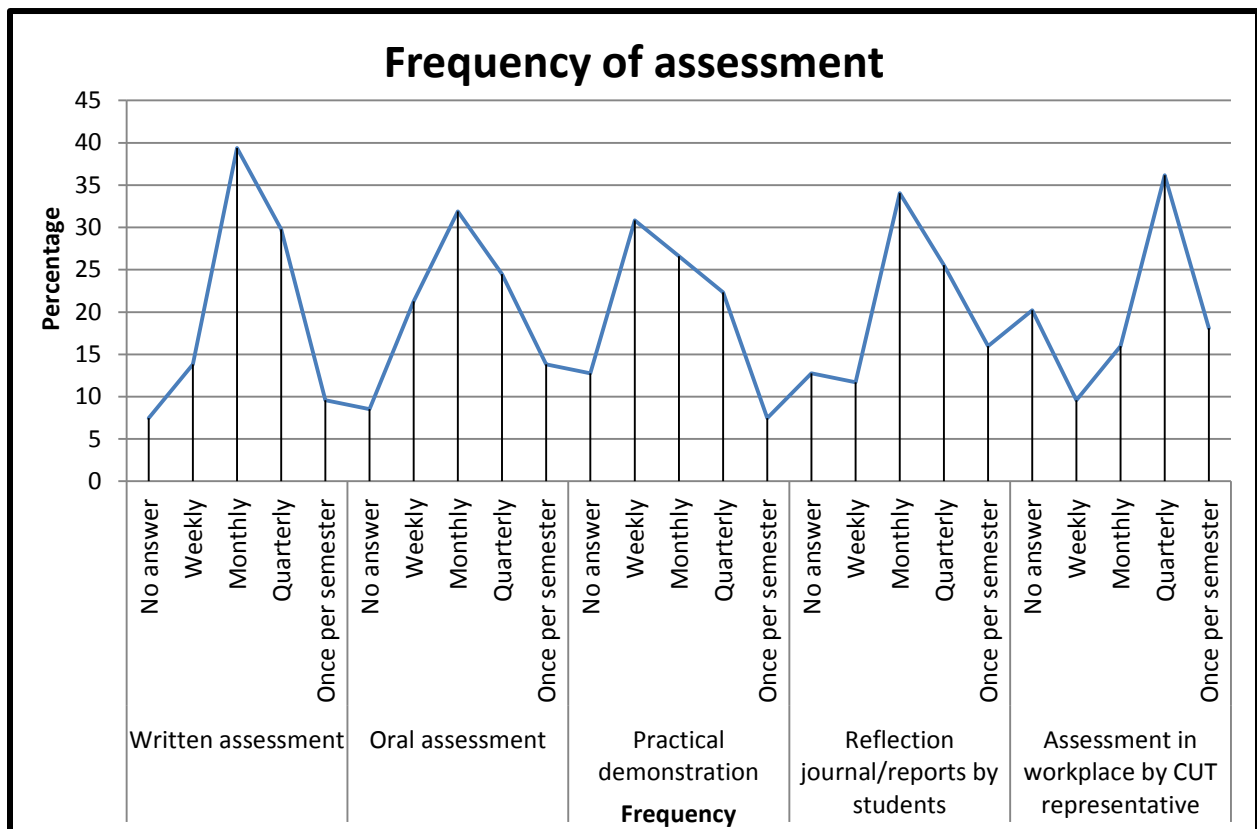


Figure 6.26: Frequency of assessment required by employers

An interesting statistic is revealed when the focus is placed on the three (3) methods identified above and arranged in a descending order of frequency. A practical demonstration is preferred on a weekly basis, followed by a written assessment on a monthly basis and an assessment in the workplace by a CUT representative on a quarterly basis. This order seems to suggest that a student first needs to demonstrate practically what he or she has learned, followed by a written assessment before an assessment by a representative from CUT is done in the workplace.

#### (g) Debriefing

The introduction to this question in the questionnaire was that, during debriefing, students had to reflect on their experiences and provide feedback on their WIL experiences. This would enable students, staff and employers to learn from the experiences students had.

Employers were asked to rate the importance of the debriefing methods provided as essential, useful or not necessary. A rating of the frequency with which debriefing needs to occur was only required as weekly, monthly, quarterly or once per semester. An opportunity was also provided for employers to select the debriefing method they regard to be the most important.

The results displayed in Figures 6.27 and 6.28, respectively confirm the centrality of students in the debriefing process. This is derived from the indications by employers that a student debrief with CUT is regarded as the most essential and that a student debrief with an employer is regarded to be the most important. However, there were variances in the ranking order of what was regarded as essential and most important. As an example, a written report was the fifth most essential method, but contrastingly selected as the second most important. Seen collectively, the methods with the highest combined ratings were a student debrief with an employer, a student debrief with CUT, a CUT debrief with an employer and a written report. These methods are therefore focused on in analysing the frequency of debriefing required in Figure 6.29.

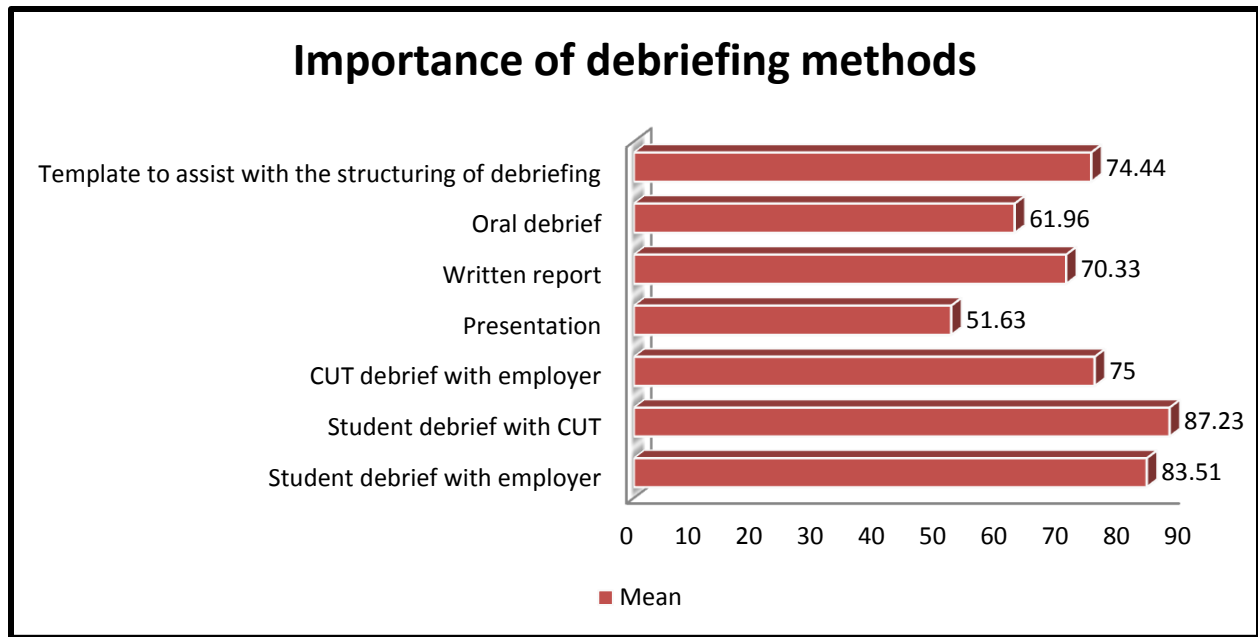


Figure 6.27: Debriefing methods regarded by employers as essential

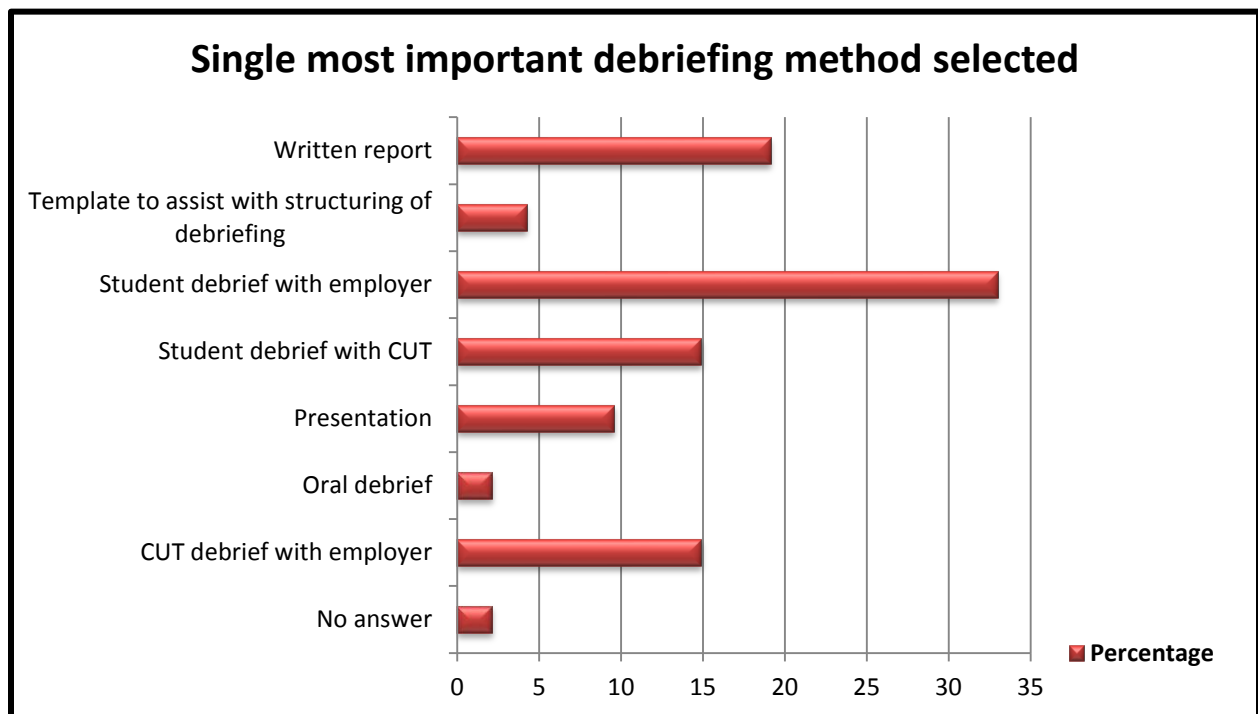


Figure 6.28: Debriefing method selected by employers as the most important

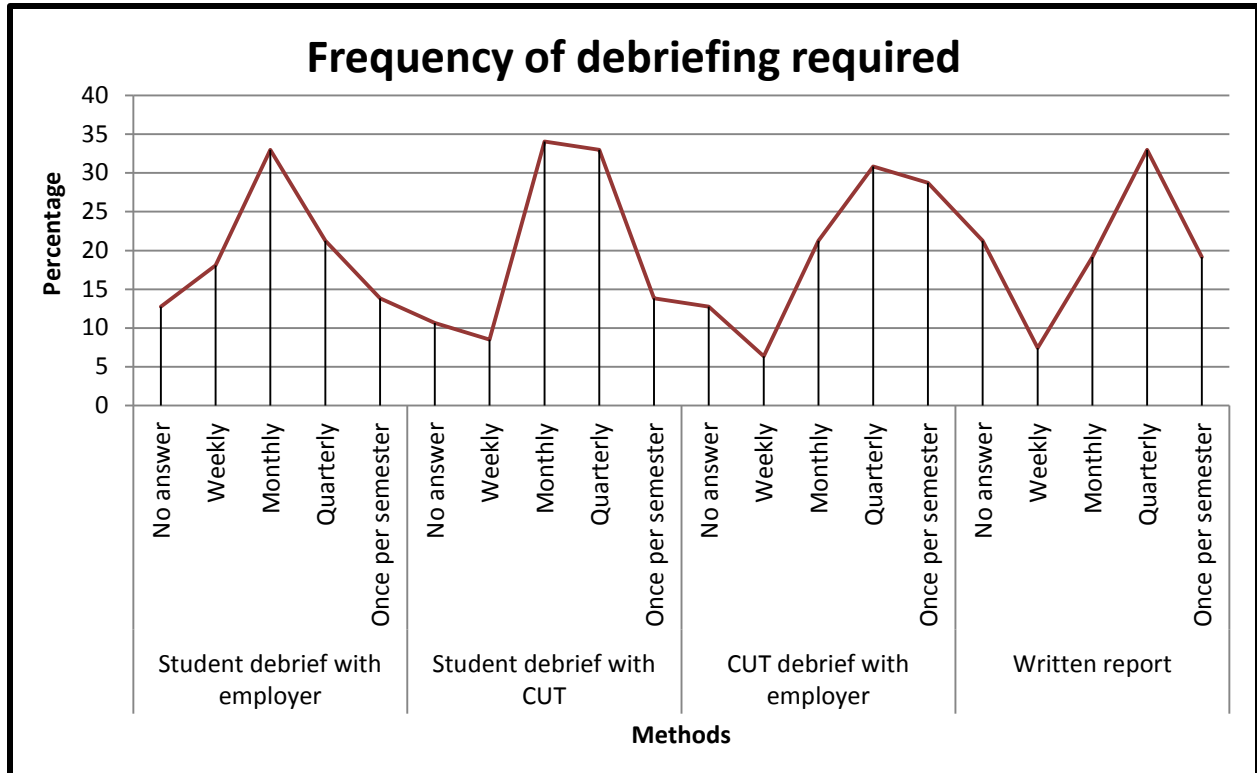


Figure 6.29: Frequency of debriefing required by employers

In accordance with the centrality of students indicated above, the frequency of debriefing between students and employers as well as students and CUT is preferred on a monthly basis. Debriefing between CUT and employers and written reports are comparatively required on a less frequent basis, with quarterly contact preferred in these cases.

It can therefore be concluded that students ought to be central in the debriefing process and that students' debriefing with CUT and employers can be regarded as the most essential and important. Debriefing which involves students need to happen on a monthly basis whereas a debriefing between CUT and employers needs to occur on a quarterly basis.

Since this study is also aimed at providing CUT with a competitive advantage over major competitors other preferences of employers had to be determined as well to position CUT accordingly. These preferences are analysed in the next section dealing

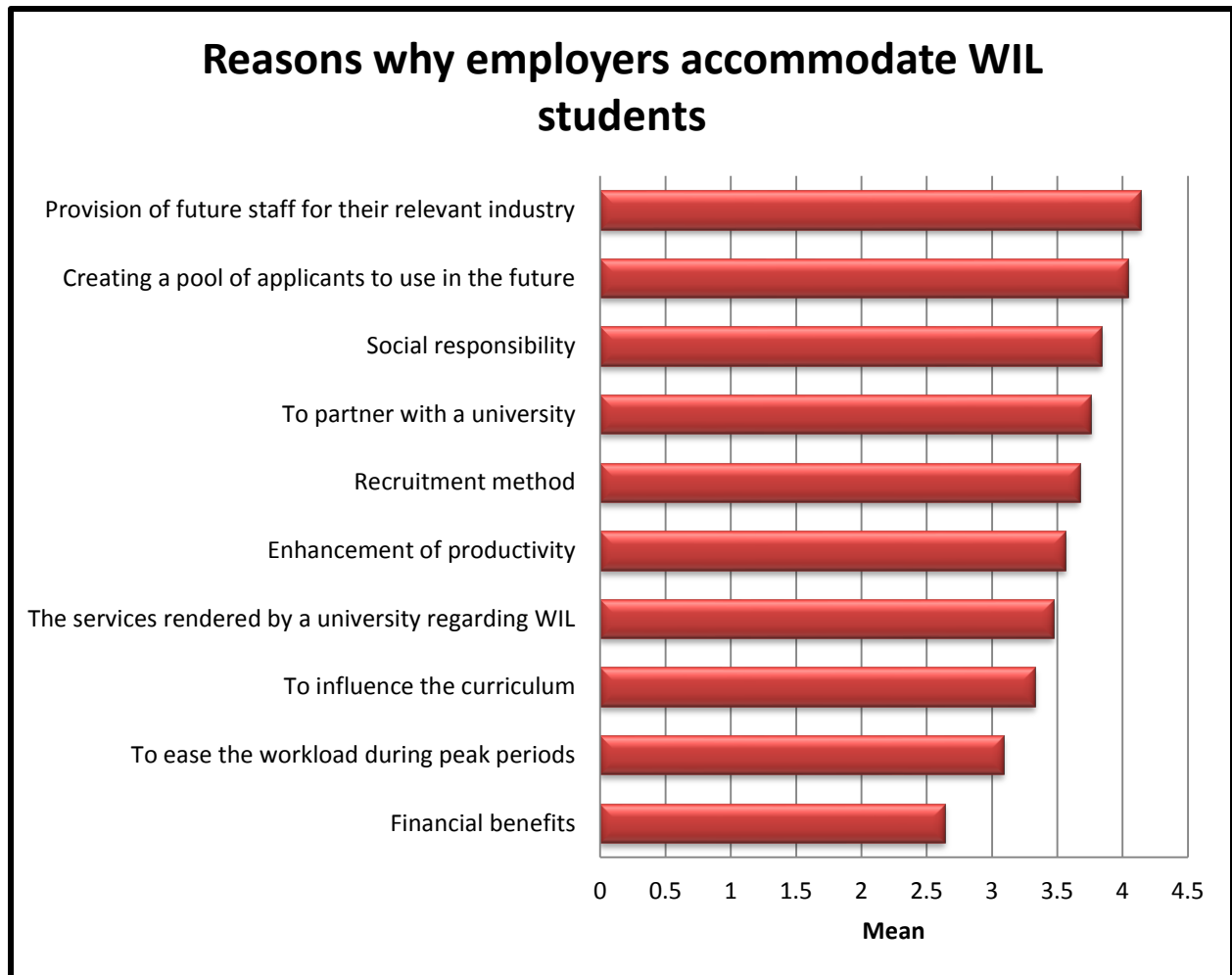


with more general issues related to WIL and is concluded by means of a SWOT analysis in the final section.

### **Section E – General issues related to WIL**

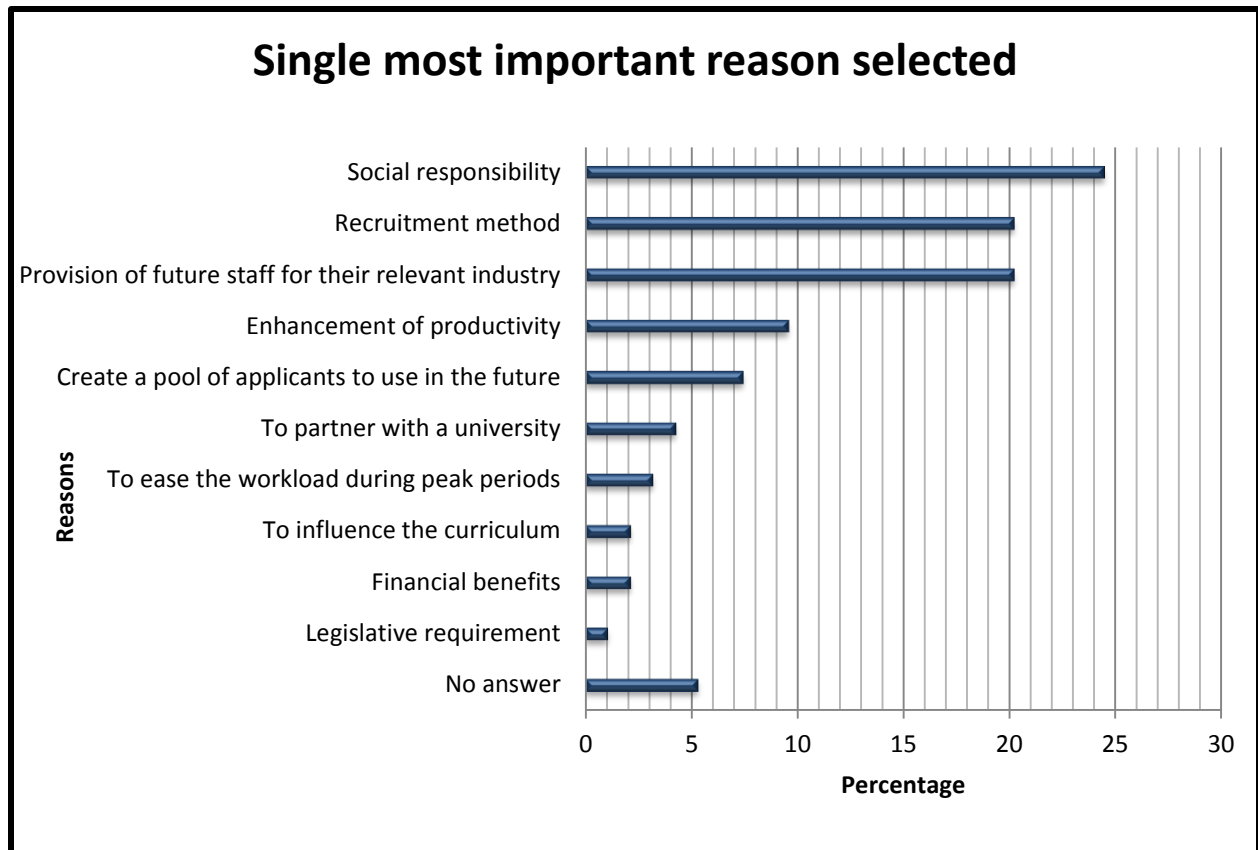
The questions in this section are aimed at gathering information that will enable CUT to satisfy the needs of employers in such a manner that CUT will become employers' partner of choice with regard to WIL. Information such as why employers accommodate students for WIL, the importance of WIL in recruitment processes, what specifically about WIL enhances employability, the importance of individual elements of the WIL quality cycle in terms of employers' decisions whom to partner with regarding WIL, the services that need to be rendered to employers that will influence their choice of a partner as well as reasons why students from one university would be preferred are therefore important and gathered in this section.

The first question in this section was aimed at determining the reasons why employers accommodate students for WIL as well as to indicate the most important reason for their participation. The rationale is that once the reason or reasons are known, that CUT can then align itself accordingly to best satisfy the needs of employers. A list of statements was provided with reasons why employers accommodate WIL students for WIL. The Likert-scale statements had required of employers to rate the statements by using the following scale: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree. The analysis of these responses is presented in Figure 6.30.



*Figure 6.30: Reasons why employers accommodate students for WIL*

The interesting statistic to emerge initially from the results in Figure 6.30 is that employers are not primarily involved with WIL as a recruitment method for their organisations, since this reason was rated as the fifth most important. This statistic could change, though, as experienced with other analyses in this chapter, when the single most important reason has to be selected as indicated in Figure 6.31.



*Figure 6.31: Reason selected by employers as most important for accommodating students for WIL*

The importance of a recruitment method has markedly increased when employers had to select the single most important reason why they accommodate students for WIL. Also interesting to note is that the importance of partnering with a university has decreased in this regard. One employer in education also indicated legislative requirements as the most important reason why the relevant school accommodated students for WIL. In order to determine the most important reasons, the responses to both questions are compared and shown in Table 6.5. The 5% principle, as explained and used with regard to Table 6.3, is applied again to determine and select the most important reasons.

Table 6.5: Comparison of reasons why employers accommodate students for WIL

Reasons Figure 6.30	Mean	Reasons Figure 6.31	Percentage
Provision of future staff for their relevant industry	4.14	Social responsibility	24.47
Creating a pool of applicants to use in the future	4.04	Provision of future staff for their relevant industry	20.21
Social responsibility	3.84	Recruitment method	20.21
To partner with a university	3.76	Enhancement of productivity	9.57
Recruitment method	3.67	Create a pool of applicants to use in the future	7.45
Enhancement of productivity	3.56	To partner with a university	4.26
The services rendered by a university regarding WIL	3.47	To ease the workload during peak periods	3.19
To influence the curriculum	3.33	Financial benefits	2.13
To ease the workload during peak periods	3.09	To influence the curriculum	2.13
Financial benefits	2.64	Legislative requirement	1.06

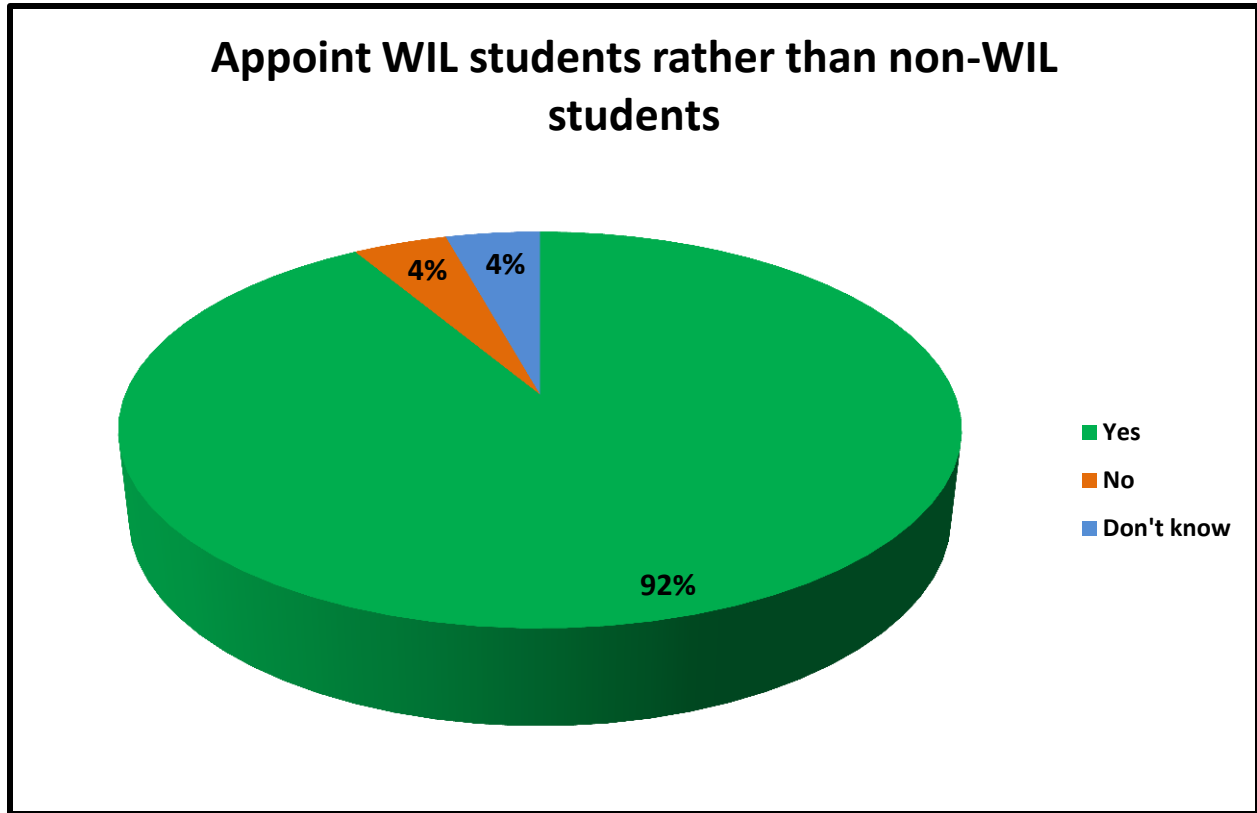
The most important reasons why employers accommodate students for WIL as derived from the second column in Table 6.5 are social responsibility, provision of future staff for their relevant industry, recruitment method, enhancement of productivity as well as to create a pool of applicants to use in the future.

A comparison of both columns indicates that enhancement of productivity in the second column cannot be supplemented in importance from the first column. The top reasons why employers accommodate students for WIL are therefore: social responsibility, provision of future staff for their relevant industry, recruitment method and creating a

pool of applicants to use in future. It can therefore also be deduced that employers are primarily motivated by social responsibility to accommodate students for WIL with a strong focus on recruitment since the other three (3) reasons all contain a recruitment element. This provides valuable information in respect of the approach to follow with employers to satisfy their needs when negotiating placements for WIL, which is elucidated by the following explanations received (quoted verbatim):

- “Everyone in the community must contribute towards a better future.”
- “Pool of suitable EE candidates needed.”
- “The better you know the applicant the more successful recruitment will be.”
- “It is a cost-effective way to contribute to staff development and recruitment.”
- “WIL programme offers an opportunity to sculpt talent the way it would be best utilised for the benefit of the business and the student's development and growth based on future trends that the business war for talent presents unto business and opportunities.”
- “Electrical engineering is regarded as a scarce skill and we can by means of WIL get to know the students and how they will perform in our environment”.

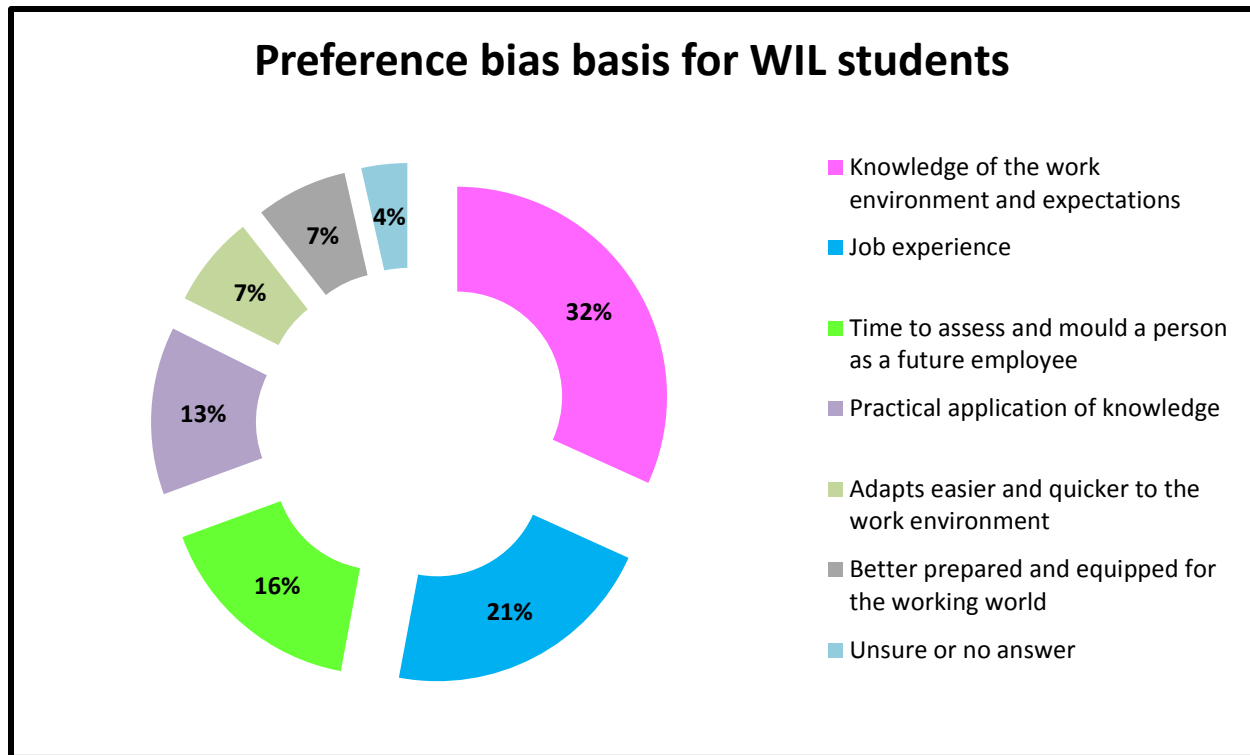
The next question requested employers to indicate whether they would prefer to appoint students in their organisations who had completed WIL, as opposed to students who did not complete WIL, as well as the reason(s) for their choice. This would be a very interesting statistic given that it was already determined that on average two (2) CUT students were offered employment upon completion of WIL compared to one (1) student employed who did not complete any WIL. These responses are shown in Figure 6.32 and Figure 6.33 below.



*Figure 6.32: Preference to appoint WIL students rather than non-WIL students*

It is clear from the statistics in Figure 6.32 that employers do prefer to appoint WIL students rather than non-WIL students. This provides further confirmation of the empirically proven fact that WIL does enhance the employability of students. It can therefore also be deduced that CUT has taken the right decision to include WIL in all qualifications.

What is equally important to know is why employers would have a preference bias for WIL students. These reasons are displayed in Figure 6.33.



*Figure 6.33: Reasons for employers' preference bias for WIL students*

Due to the qualitative nature of this question, the qualitative analysis approach explained at the start of the chapter was used to present the information in a quantitative manner in Figure 6.33.

Knowledge of the work environment and expectations as well as job experience are clearly the most important reasons why employers prefer to appoint WIL students rather than non-WIL students. In addition, it needs to be noted that the strong focus on recruitment as determined in the reasons why employers accommodate student for WIL is further accentuated by the third most important reason for employers' preference bias for WIL students. Employers indicated that during WIL they were also presented with time to assess and mould a person as a future employee. Further clarity is provided by the following explanations quoted verbatim:

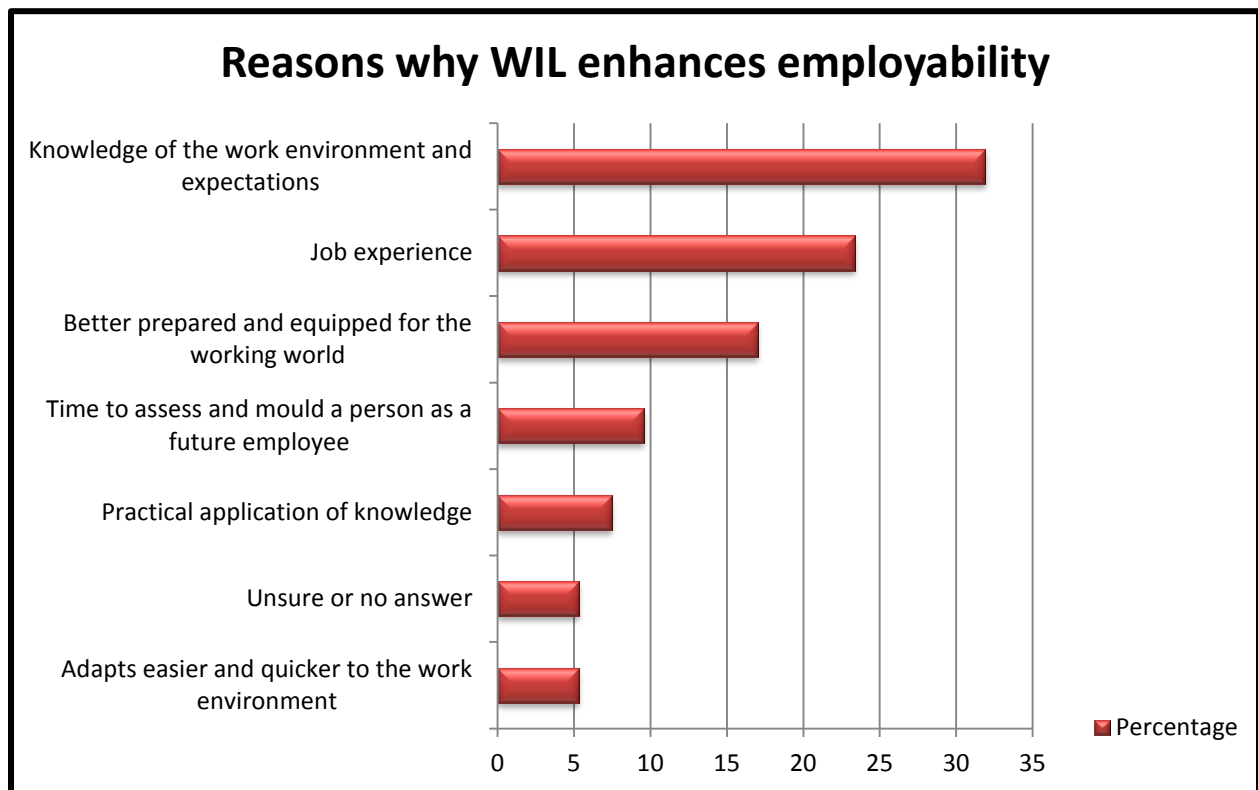
- "They would have gained experience necessary for the job concerned."

- “Those who have completed WIL already have practical exposure to the world of work and will take a shorter period to train up to the level where they make a meaningful contribution to the organization.”
- “They have on-the-job experience and been introduced to employer expectations.”
- “WIL students have a much better understanding of what the industry requires, and those that have completed their WIL in an establishment similar to ours will understand the unique challenges of the type of clientele we accommodate.”
- “They already have the background training and the basics underway and a good understanding of this industry.”
- “That way they have learned the culture of the company before being appointed and also the industry.”
- “The student may be employed at lower costs to be developed into a valuable resource.”
- “The student has worked and picked up the traits that we want in our company.”

In summary, it can therefore be concluded that WIL students are overwhelmingly preferred to non-WIL students, based primarily on their knowledge of the work environment and expectations as well as job experience, which provides employers with the time to assess and mould a person as a future employee.

The next issue addressed was to determine what specifically about WIL enhances the employability of students since the following question was posed in chapter 1: “What specifically about WIL enhances the employability of students and how can this be optimised in a strategy?” The responses were analysed with the same qualitative analysis approach as employed above and are presented in Figure 6.34.





*Figure 6.34: Specific reasons why WIL enhances employability*

Interestingly enough, the very same reasons were presented as the reasons given why WIL students are preferred to non-WIL students. The only noticeable differences are in the ratings with regard to the time that employers have to assess and mould a person as a future employee (which has declined from 16,46% to 9,57%) and the assertion that WIL students are better prepared and equipped for the working world (which has increased from 7,06% to 17,02%). The three most important reasons are therefore knowledge of the work environment and expectations, job experience and students who are better prepared and equipped for the working world.

What can then be learned from this regarding what specifically about WIL enhances employability? It stands to reason that knowledge of the work environment and expectations as well as job experience can be regarded as prerequisites for being better prepared and equipped for the working world. The conclusion is therefore made that knowledge of the work environment and expectations gained through the unique job

experience that WIL provides enable students to be better prepared and equipped for the working world, which can be regarded as the specific ingredient about WIL that enhances employability.

The relative importance of individual elements of the WIL quality cycle and the impact thereof on employers' decisions who to partner with regarding WIL also had to be determined as indicated above. Employers were asked to rate the statement made in respect of each individual element of the WIL quality cycle that the manner in which it is done would influence their choice of which university to partner with, for example:

“The manner in which students are prepared for WIL will influence my choice whether to accommodate students for WIL from a particular university.”

The same Likert-scale was used as in the reasons why employers accommodate students for WIL above. The analysis of these responses is presented in Figure 6.35.

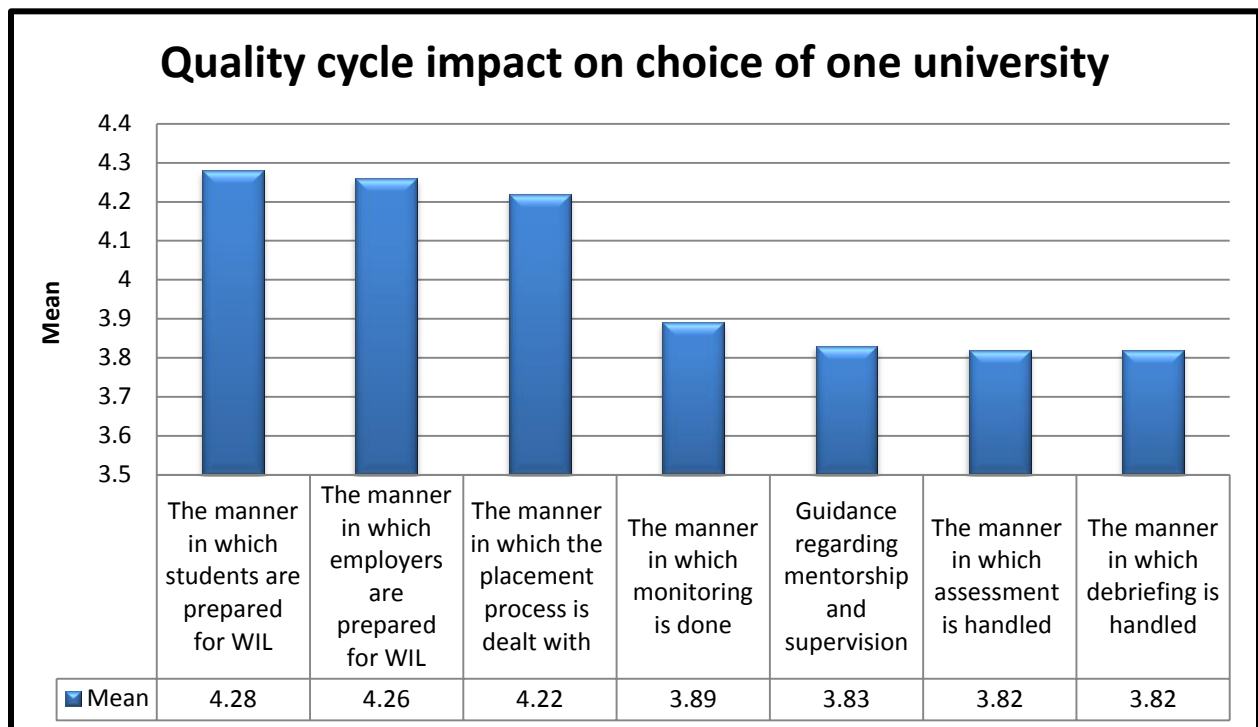
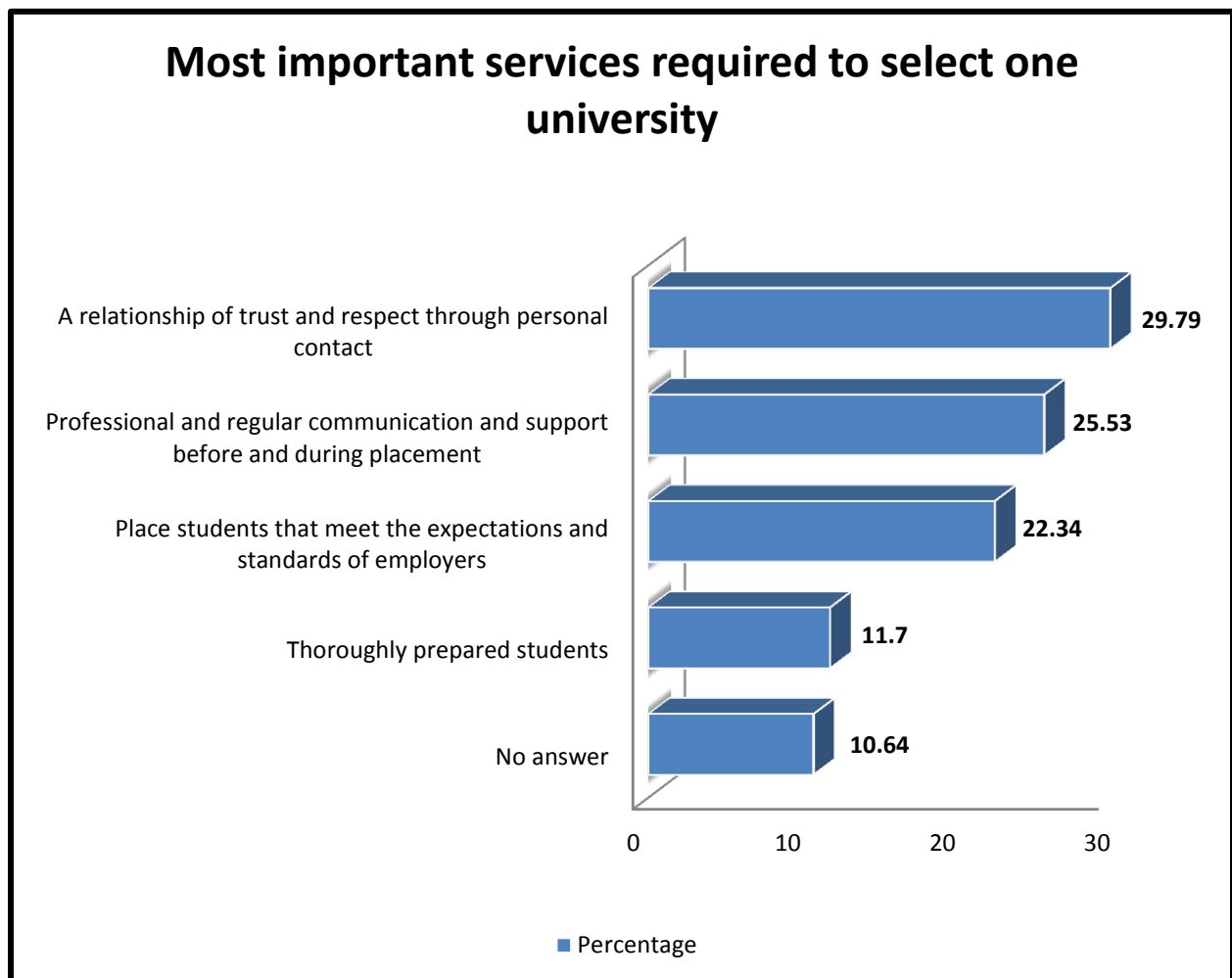


Figure 6.35: Impact of the WIL quality cycle on choice of university

Although all the elements received a rating average of almost four (4), it is clear that the first three (3) elements are of more importance to employers. The manner in which employers and students are prepared for WIL as well as the manner in which the placement process is dealt with are therefore the elements requiring special attention which could make the difference as to which university employers would partner with.

The qualitative analysis approach was again followed to determine most important reasons why employers would prefer one university to another regarding WIL based on the identification of services they want rendered by the university. The results are shown in Figure 6.36.



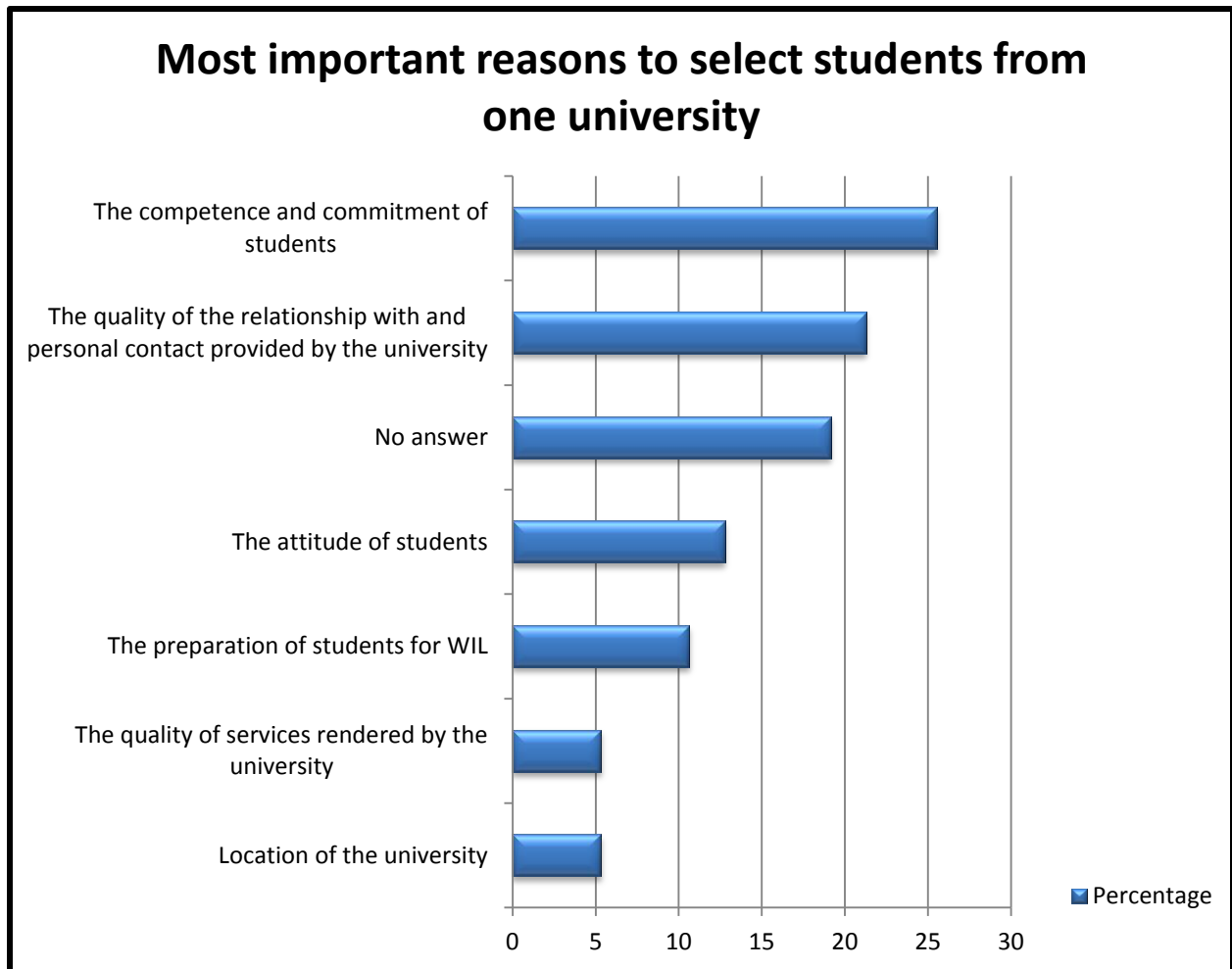
*Figure 6.36: Services required by employers that will influence their choice of university*

Four (4) clear issues had emerged as indicated in Figure 6.36. On closer inspection it seems that these issues can be divided further into two broad categories, namely contact with employers (the relationship of trust and respect through personal contact as well as professional and regular communication and support before and during placement) and the standard of students (place students that meet the expectations and standards of employers as well as thoroughly prepared students). It is also important to note that personal relationships of trust as well as the value of and need for professional and regular communication are becoming recurring themes in this study.

What employers therefore want is a relationship of trust and respect built through personal contact and complemented by professional and regular communication and support before and during the placement of thoroughly prepared students that meet the expectations and standards of employers.

It was also necessary to determine the reasons why employers would prefer students from one university to another regarding WIL since this would also have an impact on the employability of students as well as the positioning of CUT to gain a competitive advantage.

The responses received were again analysed in terms of the qualitative analysis approach. The responses received were captured verbatim on a matrix and analysed to identify commonalities and trends. The commonalities and trends were then labelled as themes and each response placed under a relevant theme, which enabled the quantitative determination of the significance of each theme. There were six (6) themes or reasons that could be identified as described in Figure 6.37.



*Figure 6.37: Most important reasons for preferring students from one university*

It is interesting to note that the responses covered more issues than the students themselves. The responses can again be divided into two broad categories, namely the standard of the students in terms of competence, commitment, attitude as well as preparation and what is offered by the university in terms of location, personal contact and a quality relationship and services. The competence and commitment of students as well as the quality of the relationship with personal contact provided by the university are clearly the most important reasons though.

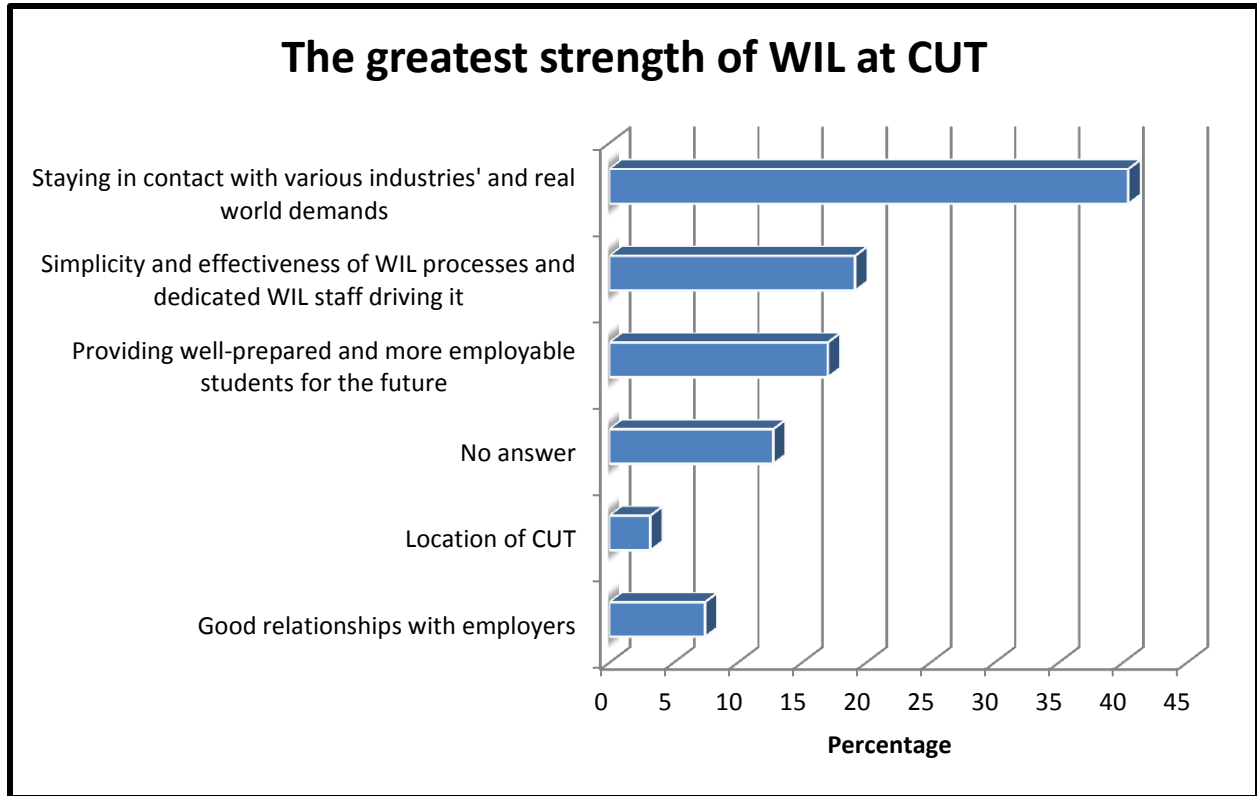
Since the quality of the relationship and services provided by the university have already been established as pertinent issues, it seems necessary to create a student profile from this analysis that could be compared with the ideal graduate student profile

already established. It is therefore concluded that employers want competent and committed students with a positive attitude who are well prepared for WIL. This compares well with the graduate student profile who need to have a positive attitude and exemplary conduct coupled with a good degree of subject matter expertise should the competence aspect be equated to subject matter expertise. Both student profiles therefore seem to be well aligned, which is good news for WIL in terms of aiding the development of the ideal graduate student profile.

The strategy lastly needs to be guided by a framework of what the broad strengths, weaknesses, opportunities and threats for WIL at CUT are. Employers were therefore requested to assist with a SWOT analysis for WIL at CUT.

### **Section F – SWOT analysis**

Employers' opinions regarding the greatest strengths, weaknesses, opportunities and threats for WIL at CUT are shown below in Figures 6.38–6.41. The responses received were also analysed in terms of the qualitative analysis approach and have therefore already been reduced to clusters. Three clusters per element of the SWOT analysis will therefore be selected as significant enough to consider due to the large number of varied responses received, especially in terms of the weaknesses and threats. A SWOT template (Table 6.6) is used to present a summary of the most pertinent issues and trends identified.



*Figure 6.38: The greatest strength of WIL at CUT, according to employers*

The three greatest strengths of WIL at CUT are:

- Staying in contact with various industries' and real world demands.
- Simplicity and effectiveness of WIL processes and dedicated WIL staff driving it.
- Providing well-prepared and more employable students for the future.

Interesting to note from this analysis is the emphasis again on contact with employers and well-prepared students. It therefore seems that WIL at CUT is currently doing well in this regard. It will be important though to build further on these strengths identified.

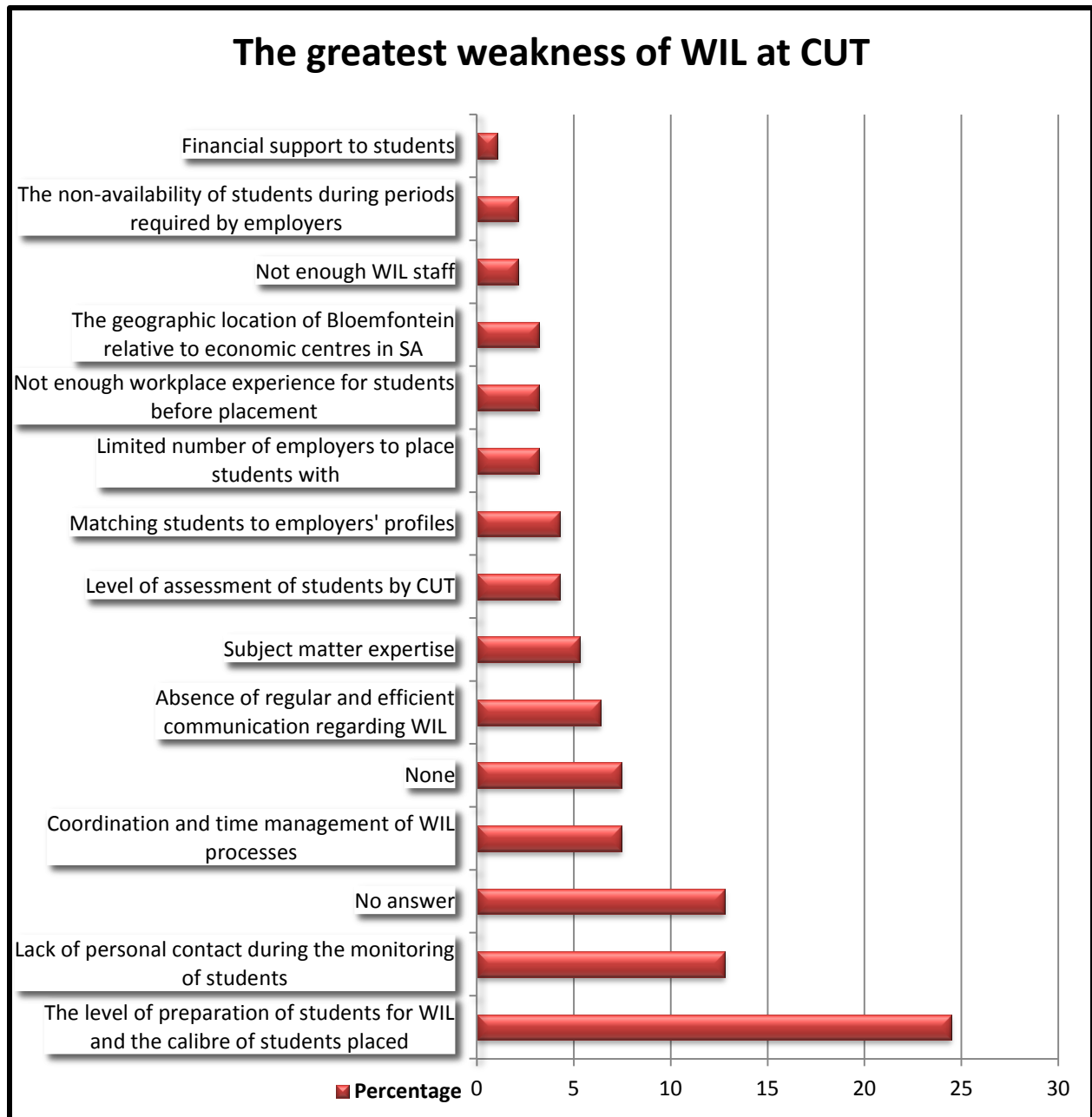


Figure 6.39: The greatest weakness of WIL at CUT, according to employers

The greatest weaknesses of WIL at CUT are the following:

- The level of preparation of students for WIL and the calibre of students placed.
- Lack of personal contact during the monitoring of students.
- Coordination and time management of WIL processes.



Whereas well-prepared students were regarded a strength, it is contrastingly viewed as a weakness as well. This weakness will most probably be faculty or qualification specific then which will be revealed during the analysis on these levels. In conjunction with a lack of personal contact, it becomes a concern, since it is in direct contrast with the services that employers want to be rendered and one of the reasons for choosing which university to partner with.

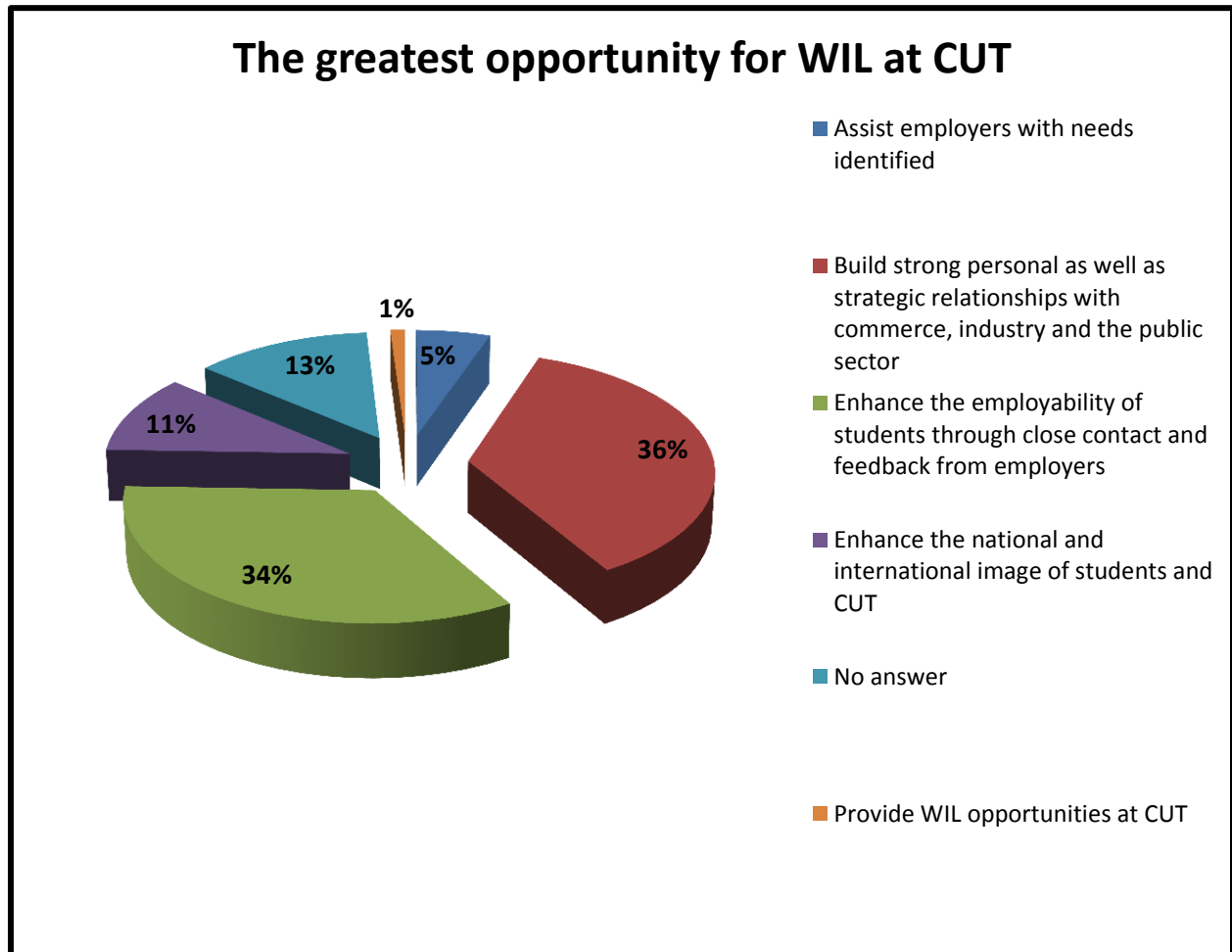


Figure 6.40: The greatest opportunity for WIL at CUT, according to employers

The greatest opportunities for WIL at CUT are to be found in the following:

- Build strong personal as well as strategic relationships with commerce, industry and the public sector.

- Enhance the employability of students through close contact and feedback from employers.
- Enhance the national and international image of students and CUT.

Relationships and close contact are yet again mentioned, which further underlines the importance thereof. The opportunities to enhance the image of students and CUT also correspond with the importance thereof as indicated in Chapter 3 as a means to differentiate oneself from one's competition.

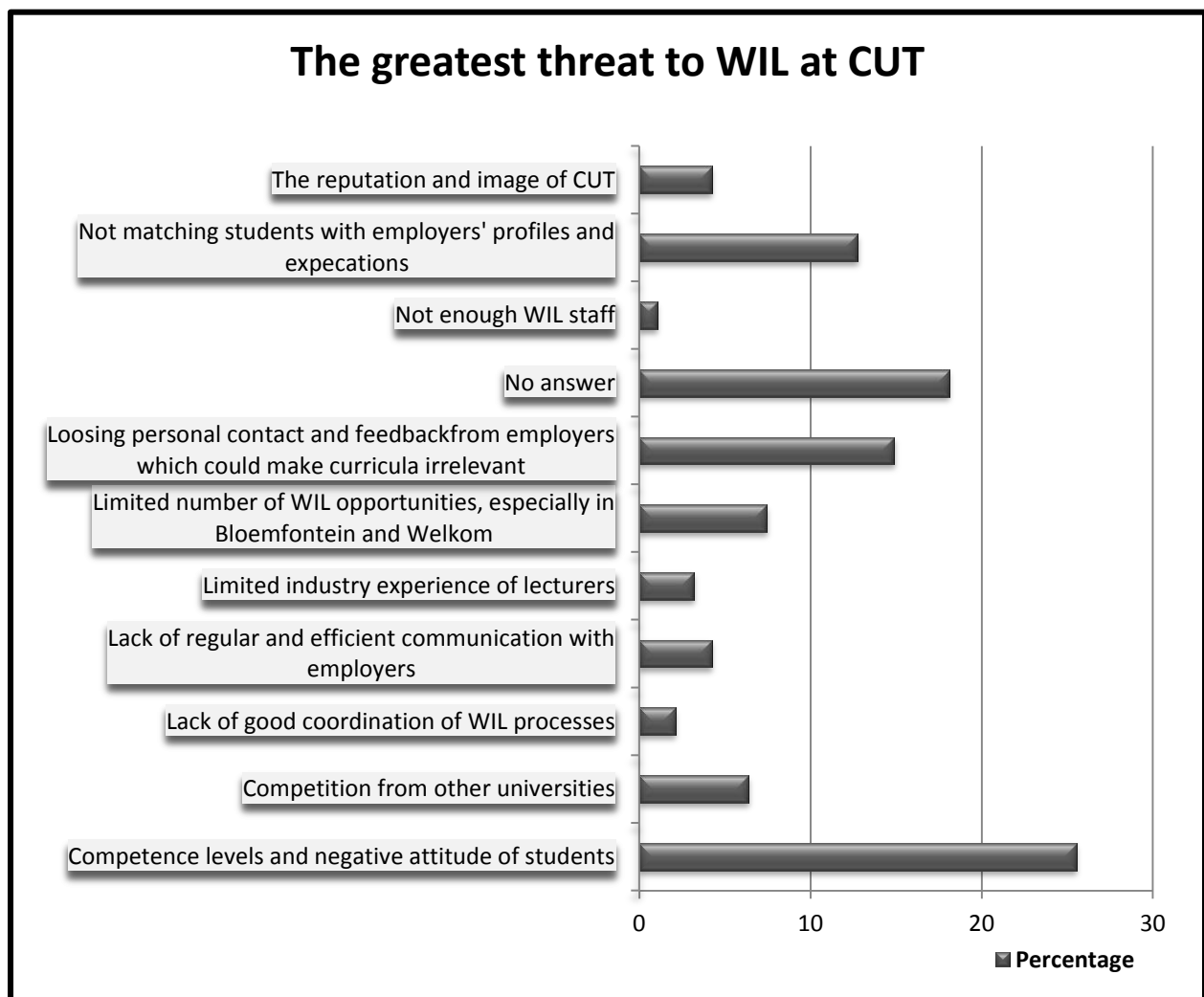


Figure 6.41: The greatest threat to WIL at CUT, according to employers

The greatest threats to WIL at CUT have been indicated as the following:

- Competence levels and negative attitude of students.
- Losing personal contact and feedback from employers, which could make curricula irrelevant.
- Not matching students with employers' profiles and expectations.

The fact that competence levels and a negative attitude of students were indicated as a threat is a cause for big concern, especially since these were key elements mentioned in the ideal profile of a WIL and graduate student. Losing personal contact has the potential to extend beyond making curricula irrelevant. The reasons are that personal contact and thoroughly prepared students that meet the expectations and standards of employers were determined to be very important services that employers require as well that influences their choice of university to partner with.

The main issues and trends identified are summarised in Table 6.6.

*Table 6.6: SWOT analysis of employers*

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Staying in contact with various industries' and real world demands</li> <li>• Simplicity and effectiveness of WIL processes and dedicated WIL staff driving it</li> <li>• Providing well-prepared and more employable students for the future</li> </ul>	<ul style="list-style-type: none"> <li>• The level of preparation of students for WIL and the calibre of students placed</li> <li>• Lack of personal contact during the monitoring of students</li> </ul> <p>Coordination and time management of WIL processes</p>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Build strong personal as well as strategic relationships with commerce, industry and the public sector</li> <li>• Enhance the employability of students through close contact and feedback from employers</li> <li>• Enhance the national and international image of students and CUT</li> </ul>	<ul style="list-style-type: none"> <li>• Competence levels and negative attitude of students</li> <li>• Losing personal contact and feedback from employers which could make curricula irrelevant</li> <li>• Not matching students with employers' profiles and expectations</li> </ul>

As was indicated in the introduction to the empirical analysis in chapter 5, the results obtained from the each questionnaire are first presented, analysed and discussed in general per stakeholder to provide a broad overview of the opinions and ratings of each stakeholder as well as to identify the pertinent issues and trends. A summary of all the pertinent issues and trends identified with regard to employers are provided per section below.

## **6.3 SUMMARY OF PERTINENT ISSUES AND TRENDS REGARDING EMPLOYERS**

### **Section A – General information of employers**

- WIL is considered an important issue for employers given that more than two-thirds of decisions regarding WIL are taken at middle and top management levels predominantly by staff with more than 5 years' experience in WIL.
- Most employers (53,19%) are small in scale (1-50 employees) with a significant percentage (34,05%) that can be classified as large (employee numbers in excess of 100).
- Although employers are predominantly located in the Free State Province, CUT has WIL employers in every province of South Africa.

### **Section B – Previous accommodation of WIL students**

- Employers do have the capacity to accommodate more CUT students for WIL.
- It has been proven empirically that WIL does enhance the employability of CUT students.
- Employers prefer to appoint students who have completed WIL with them, rather than students who did not complete any WIL.
- 50% of CUT students are employed at the employers where the students were placed for WIL.

- It seems that WIL is a recruitment method used by employers for permanent positions.

### **Section C – Skills and qualities of students and qualification structure**

- The ideal bucket of skills and qualities that students should possess when graduating from university to be appointed as an employee with an employer is attitude, subject matter expertise, work ethics, communication, people skills and professional behaviour.
- The ideal graduate student can therefore be described as a person with a positive attitude and exemplary conduct coupled with a good degree of subject matter expertise.
- CUT students are in a good, although not perfect, position currently in respect of their attainment of the requisite attitude, people skills and professional behaviour but that their work ethics, communication and subject matter expertise need improvement.
- The ideal bucket of skills and qualities should be included as part of the curriculum by means of a module, project, simulation or case study.
- To get the most out of WIL, qualifications should be structured in such a manner that students are placed for WIL for three (3) months during the second semester of the first, second and third year of study.

### **Section D – The WIL quality cycle**

(a) The preparation of students

- The most important topics to include in the preparation of students for WIL are work ethics, professional behaviour, attitude, responsibility, expectations from the workplace and verbal communication.

- It is also important to note that these topics are almost an exact copy of the ideal bucket of skills and qualities required by employers since the only omission is subject matter expertise.

(b) Preparation of employers

- The preparation of employers for WIL is encapsulated by the importance of regular and efficient communication as well as a relationship of trust built on regular and personal contact to clarify and attend to the needs and expectations of employers.

(c) Placement process

- Employers want to deal with one representative from CUT regarding placement and are generally not in favour of students approaching them for placement. A CV, cover letter and interview together with a recommendation from CUT is the preferred method to introduce students for placement to employers. In the absence of CVs and interviews, students can also be allocated by CUT to employers based on CUT's knowledge of the students and employer.

(d) Monitoring by the university

- A personal visit by a representative from CUT is confirmed to be the most important monitoring method with employers requiring personal contact on at least a quarterly or semester basis.
- This result, together with the degree of importance attached to communication via e-mail, corresponds with what was determined as the two central issues regarding the preparation of employers, namely regular and efficient communication as well as a relationship of trust built on regular and personal contact.

(e) Mentorship and supervision by employers

- Combining mentorship and supervision is the preferred method, which can be enhanced by providing employers with both guidelines and templates to assist with mentorship and supervision.

(f) Assessment by the university and employers

- A practical demonstration is regarded to be the most essential and important method.
- When the frequency of assessment required is taken into account an order of assessment and learning emerged, which indicates that students first need to demonstrate practically what they have learned, then write it down and do a written assessment before they are assessed in the workplace by a CUT representative.

(g) Debriefing

- Students ought to be central in the debriefing process.
- Students' debriefing with CUT and employers can respectively be regarded as the most essential and important methods. Debriefing which involves students need to happen on a monthly basis whereas a debriefing between CUT and employers needs to occur on a quarterly basis.

**Section E – General issues related to WIL**

- The top reasons why employers accommodate students for WIL are social responsibility, provision of future staff for their relevant industry, a recruitment method and creating a pool of applicants to use in future. It can therefore also be deduced that employers are primarily motivated by social responsibility to accommodate students for WIL with a strong focus on recruitment, since the other three (3) reasons all contain a recruitment element.
- Employers prefer to appoint WIL students rather than non-WIL students. This provides further confirmation of the empirically proven fact that WIL enhances the

employability of students. It can therefore also be deduced that CUT has taken the right decision to include WIL in all qualifications.

- WIL students are overwhelmingly preferred to non-WIL students based primarily on their knowledge of the work environment and expectations as well as job experience, which provides employers with the time to assess and mould a person as a future employee.
- The three most important reasons why WIL enhances employability are knowledge of the work environment and expectations, job experience and students who are better prepared and equipped for the working world.
- The conclusion is therefore made that knowledge of the work environment gained through the unique job experience that WIL provides enables students to be better prepared and equipped for the working world, which can be regarded as the specific ingredient about WIL that enhances employability.
- There are services that employers want to be rendered with that will influence their choice of a university to partner with regarding WIL. What employers want is a relationship of trust and respect built through personal contact and complemented by professional and regular communication and support, before and during the placement of thoroughly prepared students that meet the expectations and standards of employers.
- The reasons why employers will prefer students from one university to another are the competence and commitment of students as well as the quality of the relationship with and personal contact provided by the university.
- The ideal WIL student can therefore be described as a competent and committed student with a positive attitude who is well prepared for WIL. This profile compares well with the graduate student profile that needs to have a positive attitude and exemplary conduct, coupled with a good degree of subject matter expertise, should the competence aspect be equated to subject matter expertise.



## **Section F – SWOT analysis**

### Strengths:

- Staying in contact with various industries' and real world demands.
- Simplicity and effectiveness of WIL processes and dedicated WIL staff driving it.
- Providing well-prepared and more employable students for the future.

### Weaknesses:

- The level of preparation of students for WIL and the calibre of students placed.
- Lack of personal contact during the monitoring of students.
- Coordination and time management of WIL processes.

### Opportunities:

- Build strong personal as well as strategic relationships with commerce, industry and the public sector.
- Enhance the employability of students through close contact and feedback from employers.
- Enhance the national and international image of students and CUT.

### Threats:

- Competence levels and negative attitude of students.
- Losing personal contact and feedback from employers, which could make curricula irrelevant.
- Not matching students with employers' profiles and expectations.

In addition to the views of employers, the opinions of the two (2) other stakeholders also need to be considered as a subsidiary objective of the study. The focus therefore shifts from employers to lecturers as one of the other stakeholders in WIL.

## **CHAPTER 7**

# **A QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE FINDINGS: LECTURERS**

### **7.1 INTRODUCTION**

The questionnaires were distributed via e-mail to the identified participants, as in the case of employers. Purposive sampling was used to select the lecturers, since they needed to be in a department with programmes that contain a compulsory WIL component and have WIL experience of at least one year.

As explained in the research methodology of this study, a qualitative approach was primarily followed to elicit the views of lecturers. It was also indicated that some of the sections of the questionnaires are the same, given the overlap in issues applicable to all three stakeholders. Lecturers were therefore requested to answer questions in addition to the open-ended questions posed to them.

The target population was all lecturers responsible for the monitoring and assessment of students placed for WIL. The sample size for lecturers was fifteen (15), determined as one (1) lecturer responsible for the monitoring and assessment of WIL per department with programmes that contain a compulsory WIL component. Responses were received for thirteen (13) qualifications and departments equating a response rate of 86,7%. It has to be borne in mind, as stated previously, that due to the qualitative nature of the investigation, the number of programmes for lecturers (and students) is fewer than the number of programmes employers responded to.

The results of the lecturers' questionnaire (Annexure 2) are presented and analysed below in accordance with the broad classification of sections in the questionnaire. A summary of the most pertinent issues and trends identified with regard to all the sections indicated is provided at the end of the analysis.

#### **Section A – WIL Rationale**

**Section B** – Skills and qualities of students and qualification structure

**Section C** – WIL quality cycle

**Section D** – General issues related to WIL

**Section E** – SWOT analysis

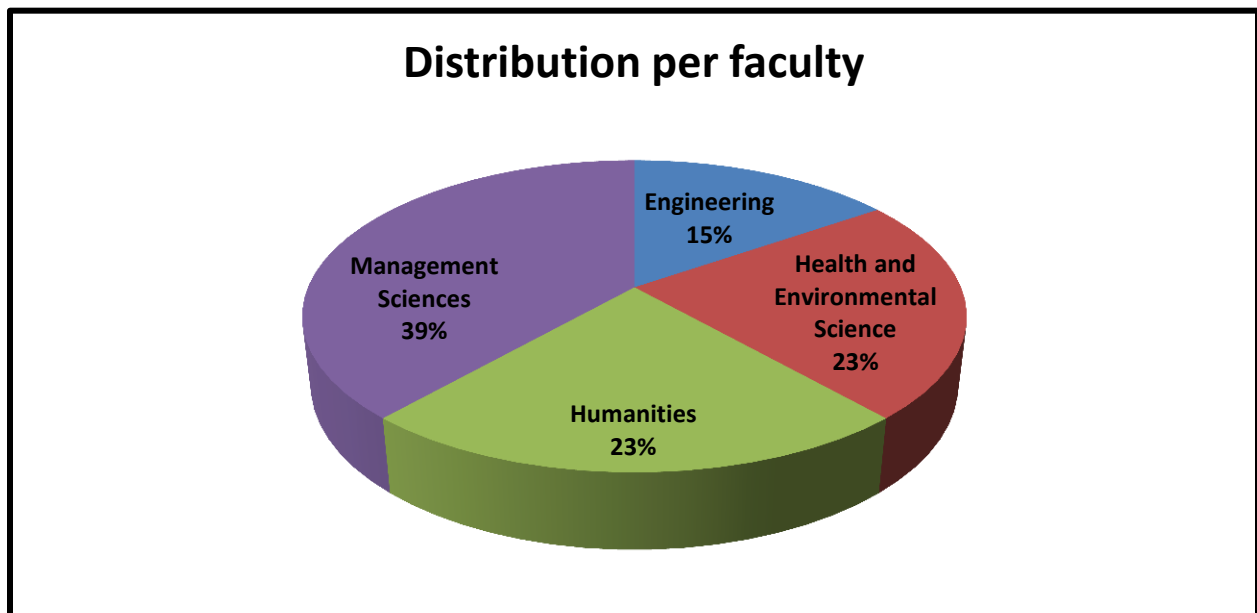
## 7.2 ANALYSIS OF LECTURERS' QUESTIONNAIRE RESULTS

### Section A – WIL rationale

The information in this section is applicable to the following aspects that are graphically presented below:

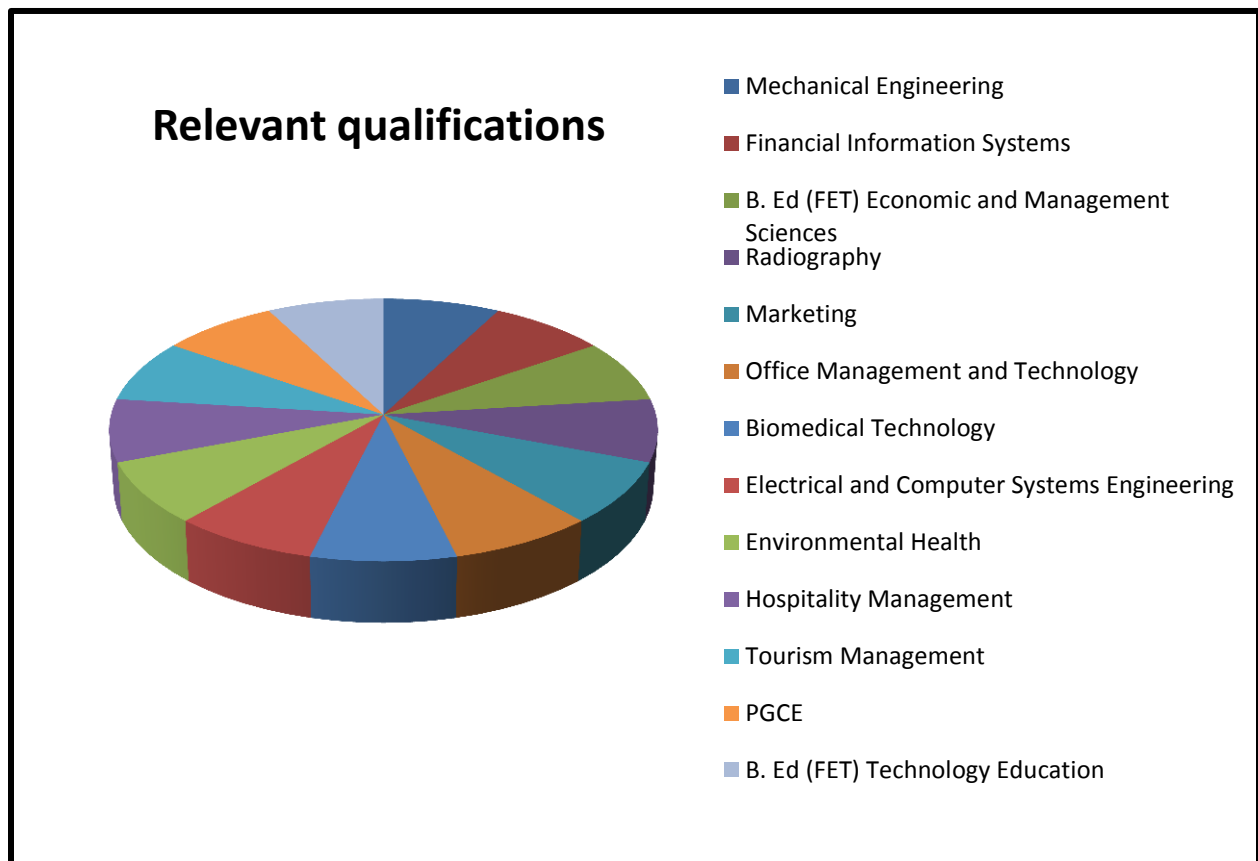
- Relevant qualifications and WIL experience
- Qualitative analysis of WIL rationale

The distribution and relevance of responses received from lecturers with regard to faculties and qualifications are indicated in Figure 7.1 and Figure 7.2 below.



*Figure 7.1: Distribution of responses per faculty*

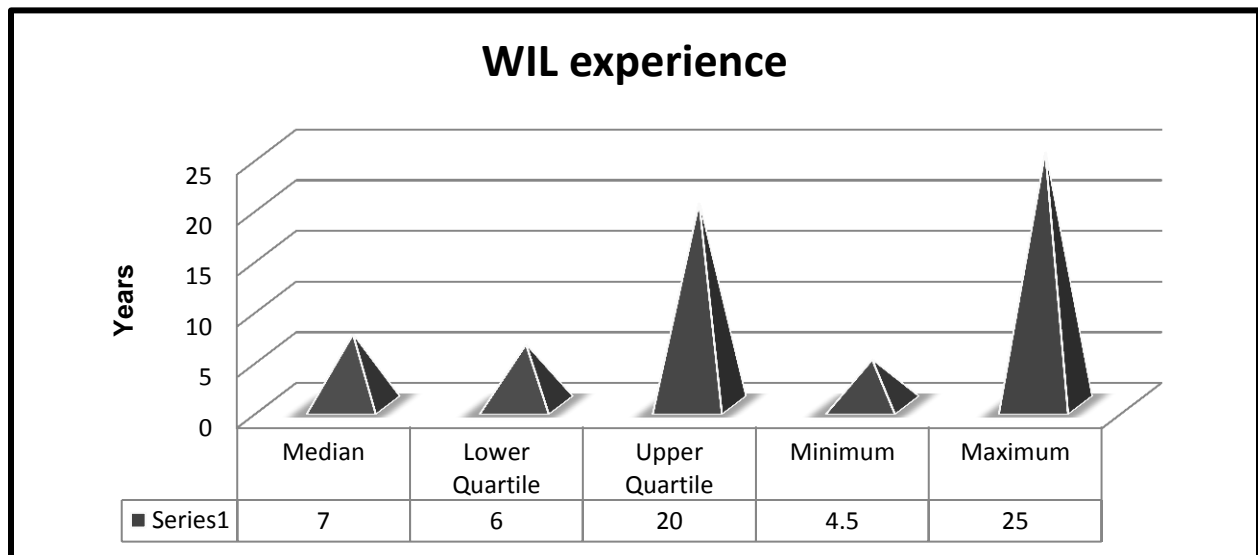
Although an even distribution was not achieved between faculties, it has to be noted that the number of qualifications is also not evenly distributed between faculties, as was indicated in Table 6.1 of the previous chapter. An overall response rate of 86,7% was achieved, with responses received for relevant qualifications, as indicated in Figure 7.2 below.



*Figure 7.2: Responses per relevant qualification*

The WIL experience of lecturers is shown in Figure 7.3. The experience reported varied between four-and-a-half (4,5) and twenty-five (25) years, with a median of seven (7) years' experience. The lecturers assigned to WIL are thus well experienced and in a good position to make comments. Their experience is also closely correlated with the six (6) years' experience of employers, which makes their inputs comparable from an experience and insight point of view, although vastly different in terms of work environment and stakeholder perspectives. This provides a broader scope and depth of

opinion, which was also the intention of the qualitative investigation that will now be focused on and analysed.

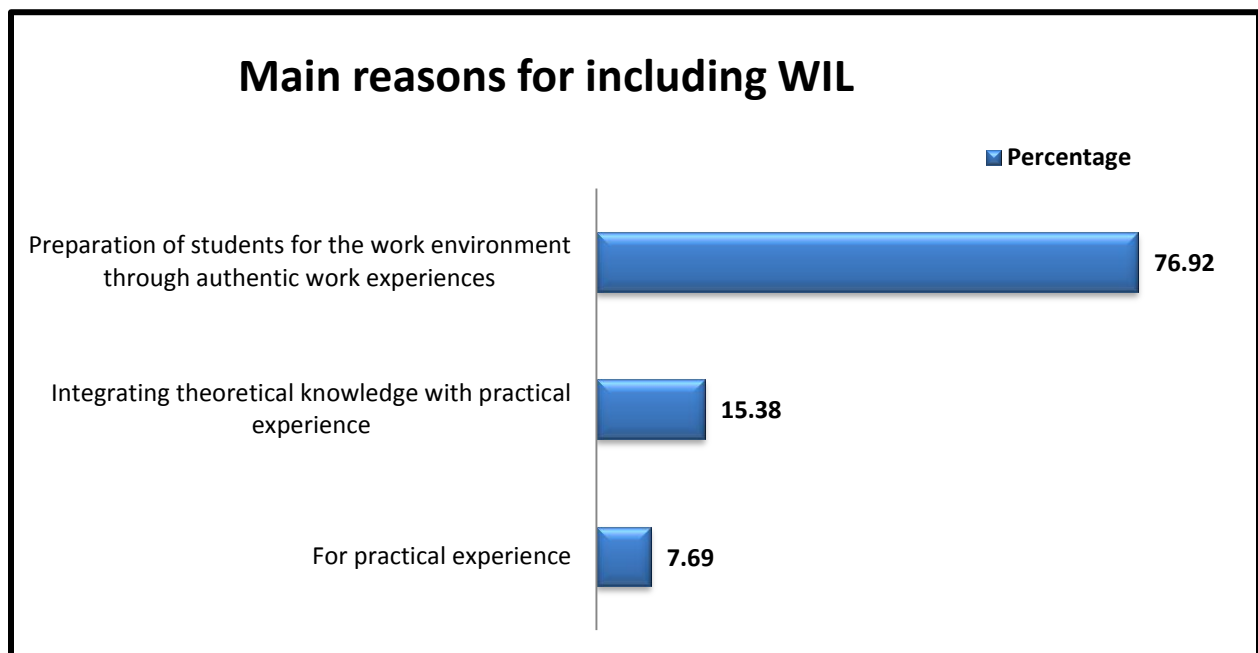


*Figure 7.3: WIL experience of lecturers*

Based on the good experience of lecturers, their views in terms of the rationale for WIL ought to be insightful and informative. Six (6) open-ended questions were posed to lecturers and were analysed in terms of the qualitative analysis approach in Chapter 5 and applied in some of the sections of the employers' analysis. The analysis per question is presented in Figures 7.4–7.9.

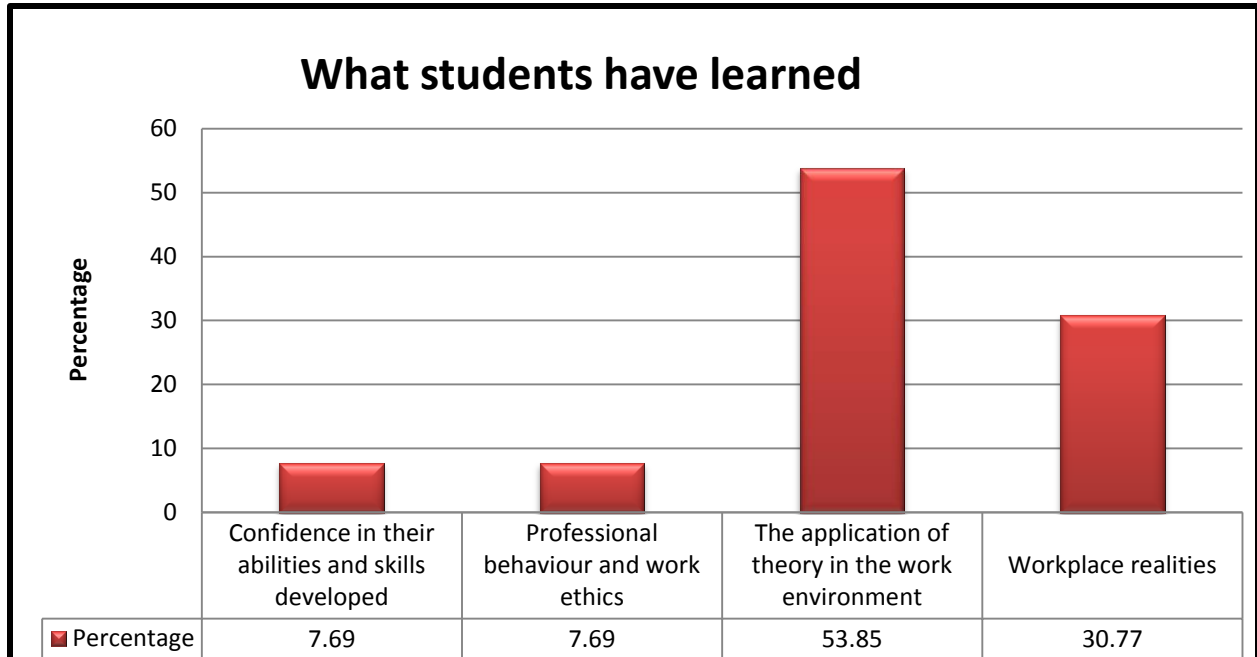
The first question was aimed at determining the main reasons for including WIL as part of a qualification. As indicated in Figure 7.4 below, the preparation of students for the work environment through authentic work experiences was clearly regarded as the most important reason. It is interesting to note that lecturers have added the requirement that work experiences need to be authentic. The implication is that students need to be active participants in the daily work activities of employers to be adequately prepared for the work environment upon graduation. The following are examples of reasons provided by lecturers who are quoted verbatim:

- “To expose students to the actual day to day experience in their field of study. Students get the opportunity to engage with real-life situations and learn how to handle these for when they are appointed in such positions.”
- “To prepare students for the actual work environment as professionals by including them in all activities of the employer, to make sure they are employable -certainty of a job!, to benefit the patient because the student will be able to render a professional service once graduated.”
- “To provide the students with an authentic work experience during their training. Prepare the students for the profession (s) in which there are studying.”



*Figure 7.4: Main reasons for the inclusion of WIL in qualifications*

The next issue to determine was what lecturers thought students have learned from the WIL included in qualifications. These results are shown in Figure 7.5.



*Figure 7.5: Lecturers' opinions of what students have learned from WIL*

Students have predominantly learned two (2) things from the inclusion of WIL in qualifications as indicated in Figure 7.5, namely the application of theory in the work environment and workplace realities. This was very pleasing to see, given that WIL is indeed about the application of theory in the work environment and workplace realities learned provide confirmation that students would have been exposed to authentic work experiences, as expected by lecturers above. Some of the explanations provided are the following:

- “They practise what they have been taught. They learn "real world" skills and see what the world of work is about. They grow as people and become more confident.”
- “The real-life environment is a shock to them. They have learnt that the industry expect more from you as an employee as a student. The practical work experience equips them better to deal with the demands of being an employee so that it is not a shock to them to work for the first time.”

Lecturers were also requested to explain what they valued most about WIL. The explanations provided are summarised in Figure 7.6.

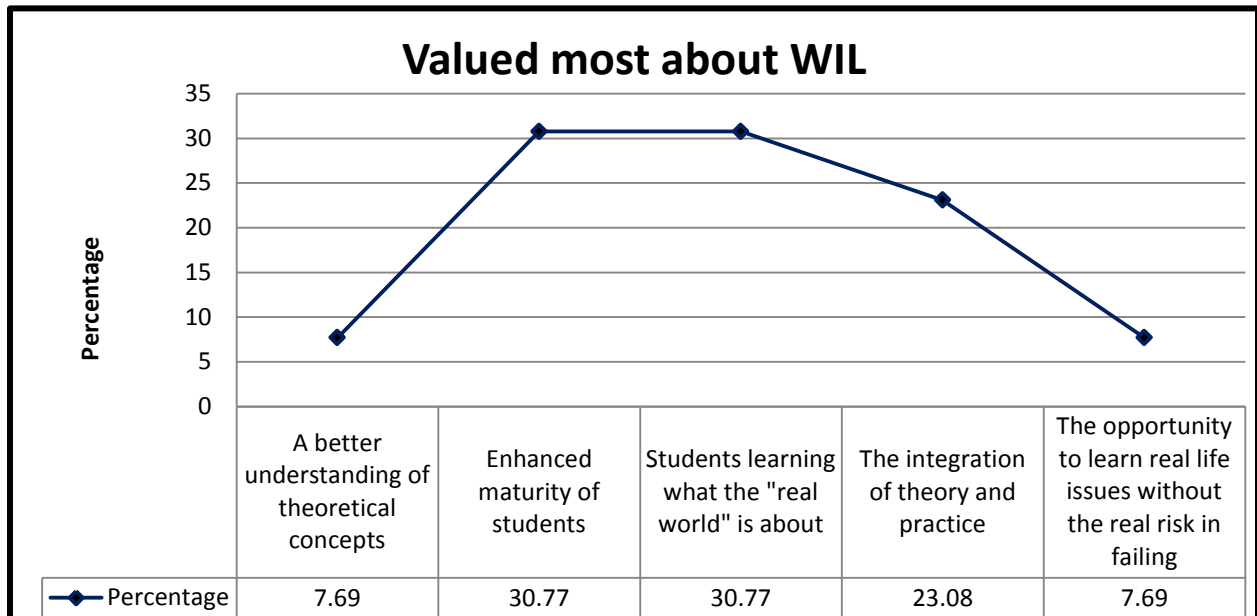


Figure 7.6: Summary of what lecturers value most about WIL

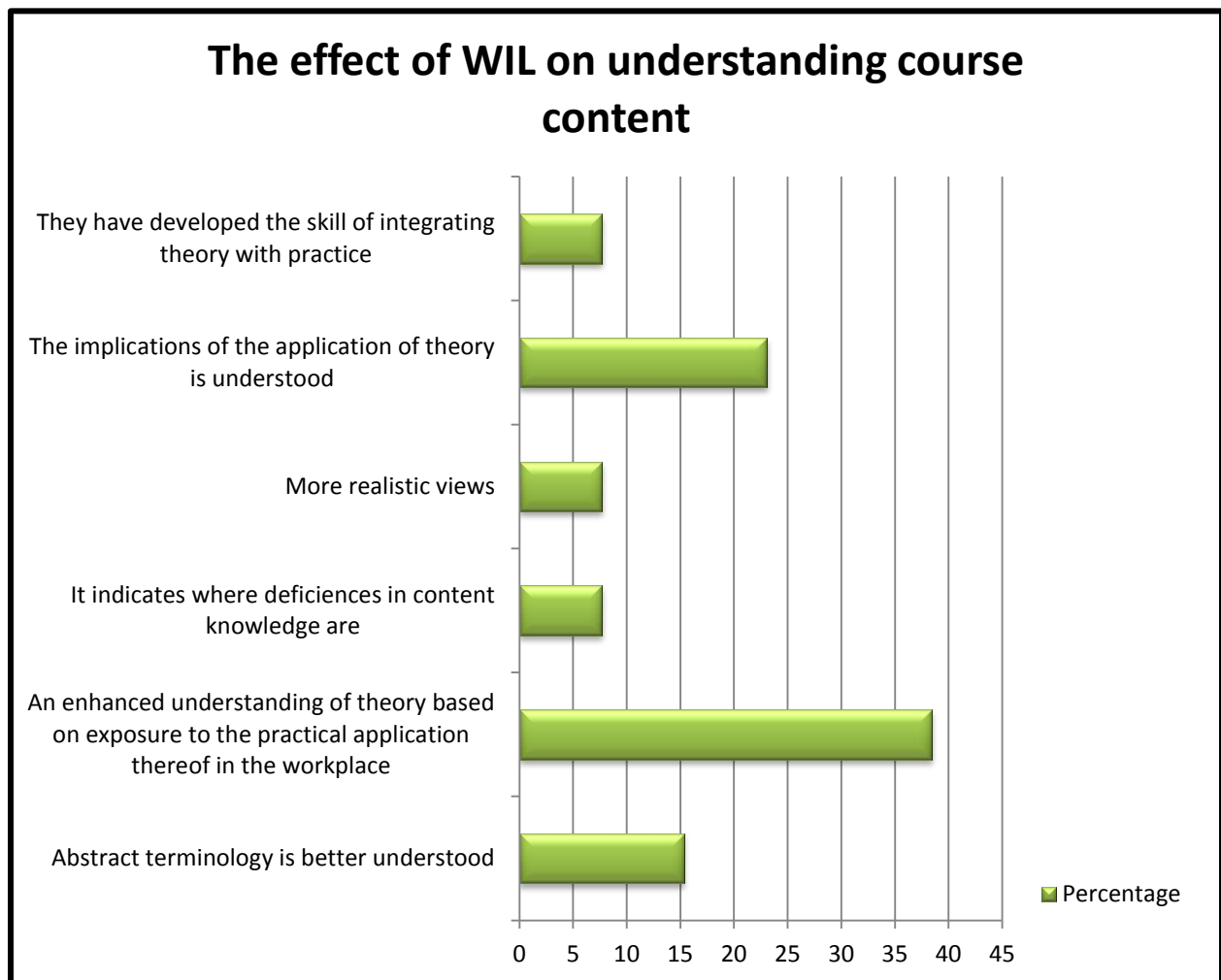
Three dominant issues can be determined from the results in Figure 7.6. In addition to lecturers' preferences already established for the "real world" and the integration of theory and practice, a more personal aspect has come to the fore in the sense that lecturers are of the opinion that WIL also contributes to the development of more mature students. It could be argued that it is most probably due to students' exposure to "real world" issues and the need to adapt accordingly.

This type of personal development also provides further evidence in support of the established specific ingredient about WIL that enhances employability being knowledge of the work environment and expectations, together with job experience that enables students to be better prepared and equipped for the working world. In this regard, there also seems to be a link with the development of the measure known as work self-efficacy as explained by Raelin *et al.* (2011:31) in Chapter 2 under the heading of the pedagogy of WIL interestingly enough. It was explained that work self-efficacy adds another dimension to explaining WIL's contribution to undergraduate studies, which is based on



the enhancement of a special form of self-efficacy that addresses the confidence acquired during WIL in handling the demands and requirements of the workplace. More detail can therefore be added to the specific ingredient of WIL that enhances the employability of students as well.

Given the importance of the application of theory in the workplace through WIL established above, it will be interesting to see whether WIL had an effect on students' understanding of the course content, as reported by the lecturers in Figure 7.7 below.



*Figure 7.7: The effect of WIL on students' understanding of course content*

Three (3) pertinent issues regarding the effect of WIL on understanding of course content can be identified from the results in Figure 7.7, namely:

- An enhanced understanding of theory based on exposure to the practical application thereof in the workplace;
- The implications of the application of theory is understood; and
- Abstract terminology is better understood

In analysing these results, it is important to note that all three (3) issues have something to do with understanding that is enhanced in three (3) different domains, namely:

- Practical application;
- Implications of theory application; and
- Abstract conceptualisation.

These results can therefore be added as a refinement to the academic benefits of WIL reported in Chapter 2, such as students engaging in a deeper approach to their learning and thus enhanced academic performance (Wilson & Fowler 2005:87-101). WIL leads to enriching students' understanding of the subject matter and enhanced academic performance, according to Kozar and Marcketti (2008:310) and Heriot *et al.* (2007:427-434), who have found that during active learning students: “are moved into a new realm of learning”, since it provides an explanation of and foundation for these benefits stated.

Based on the analysis above, it seems that students will return as different people from their WIL experiences. Whether there are any noticeable differences is indicated in Figure 7.8.

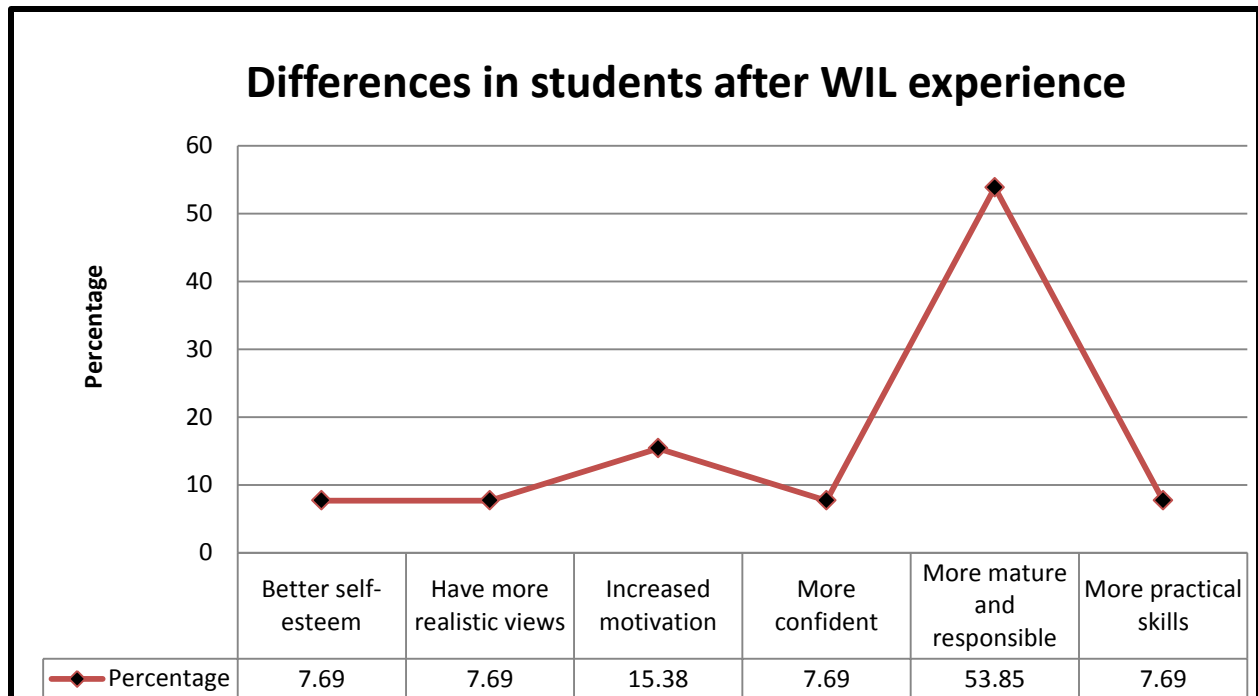
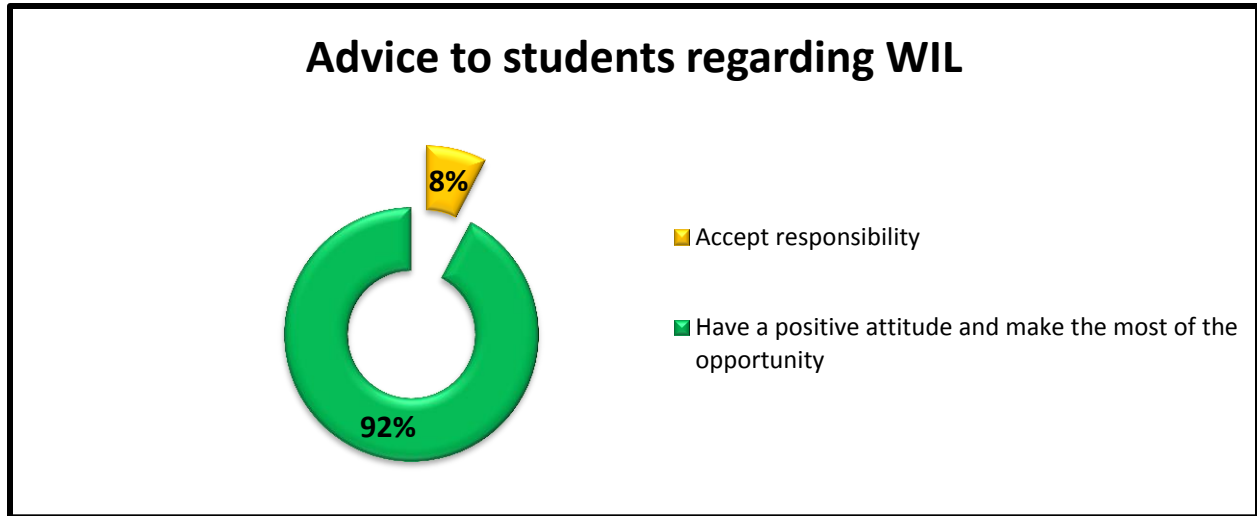


Figure 7.8: Noticeable differences in students upon completion of WIL

From the statistics presented in Figure 7.8, it is clear that students have become more mature and responsible upon the completion of their WIL experiences and have an added motivation to learn as well. The following examples of explanations received from lecturers provide further clarification in this regard:

- “They are more mature, understand the industry, understand hard work, grow as people, communicate better and apply what we have taught them.”
- “They are more matured and responsible in their communications, report back, learning and overall achievements.”
- “They are more eager to participate in class and they are keener to give examples and share experiences after WIL.”

Lecturers were also requested to indicate the advice they would give to students regarding WIL. The advice they would provide is indicated in Figure 7.9.



*Figure 7.9: Lecturers' advice to students regarding WIL*

In terms of the advice that lecturers would give, it is interesting to note that they have singled out the importance of a positive attitude, given the importance that employers attach to it as well. Whether this will be the case in terms of the skills and qualities required will be determined in the analysis of the quantitative sections of the questionnaire below.

### **Section B – Skills and qualities of students and qualification structure**

In this section, the results are presented and analysed regarding the skills and qualities that lecturers indicated students should have when graduating from university to be appointed as an employee in their field of study. This includes lecturers' ratings of their own level of satisfaction with the actual skills and qualities that students placed for WIL have attained as well as to select the one skill or quality that is the most important to them. Lecturers were also asked whether it is necessary to include the skills and qualities identified by them as part of the curriculum and how it should be included. They were also given the opportunity to provide their ideal structure of a qualification to get the maximum value added through WIL.

The rationale for these questions is the same as explained in terms of employers. Lecturers were requested to list the top five (5) skills and qualities that they think that students should have when graduating from university to be appointed as an employee

with an employer within their field of study and to select one skill or quality regarded to be as most important to them. The top five (5) skills listed by lecturers are shown in Figure 7.10.

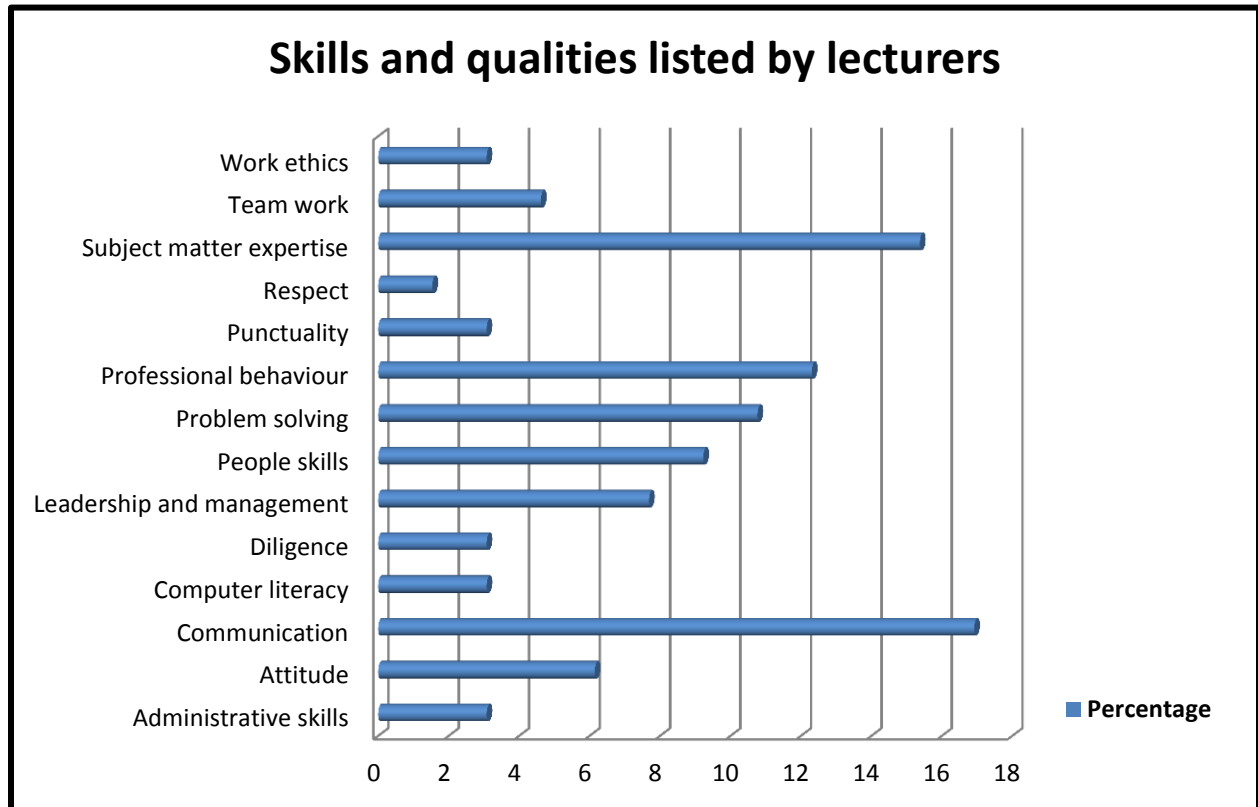
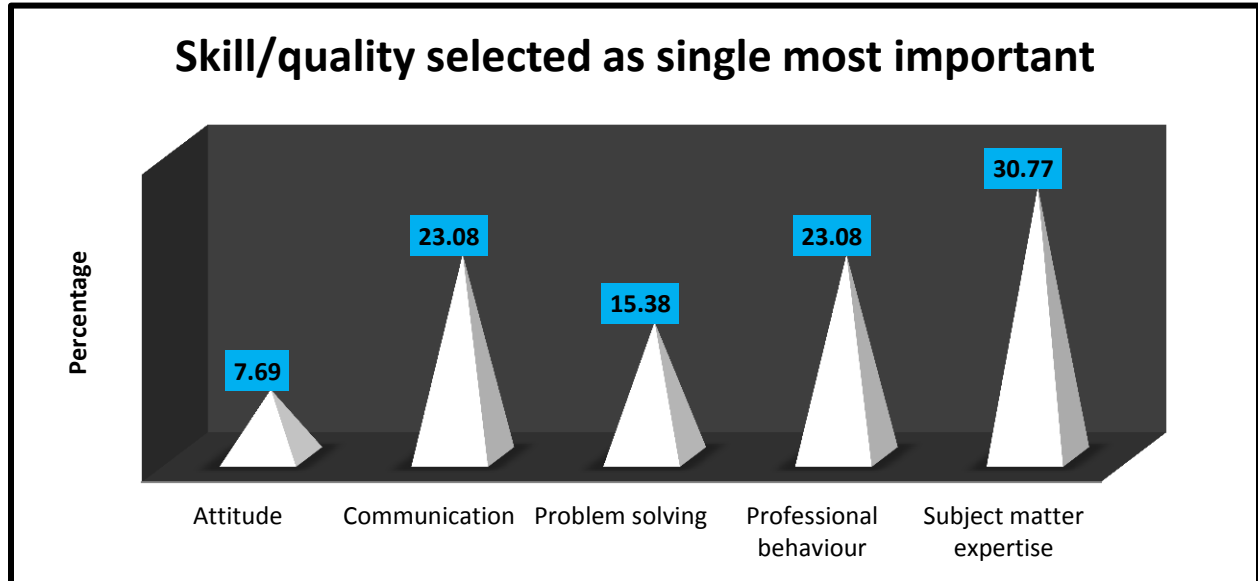


Figure 7.10: Skills and qualities listed by lecturers to be appointed as an employee

The top five (5) skills and qualities required in the lecturers' opinion in ranking order are communication, subject matter expertise, professional behaviour, problem solving and people skills. Communication and subject matter expertise are the most important quality and skill that students should possess in their opinion. Although there is an 80% overlap with the employers' list, it is surprising that attitude was ranked seventh despite the importance attached to it by lecturers with regard to the advice they would give to students and that attitude was clearly regarded as the most important quality by employers.

It would be interesting to see what the final list would look like once lecturers' selection of the single most important skill is taken into consideration, as indicated in Figure 7.11 below.



*Figure 7.11: Skill or quality selected by lecturers as the most important*

In terms of the results presented in Figure 7.11, five (5) skills and qualities were regarded by lecturers as the most important. In this case, subject-matter expertise emerged to be the skill regarded as the most important. Attitude was also included at the expense of people skills.

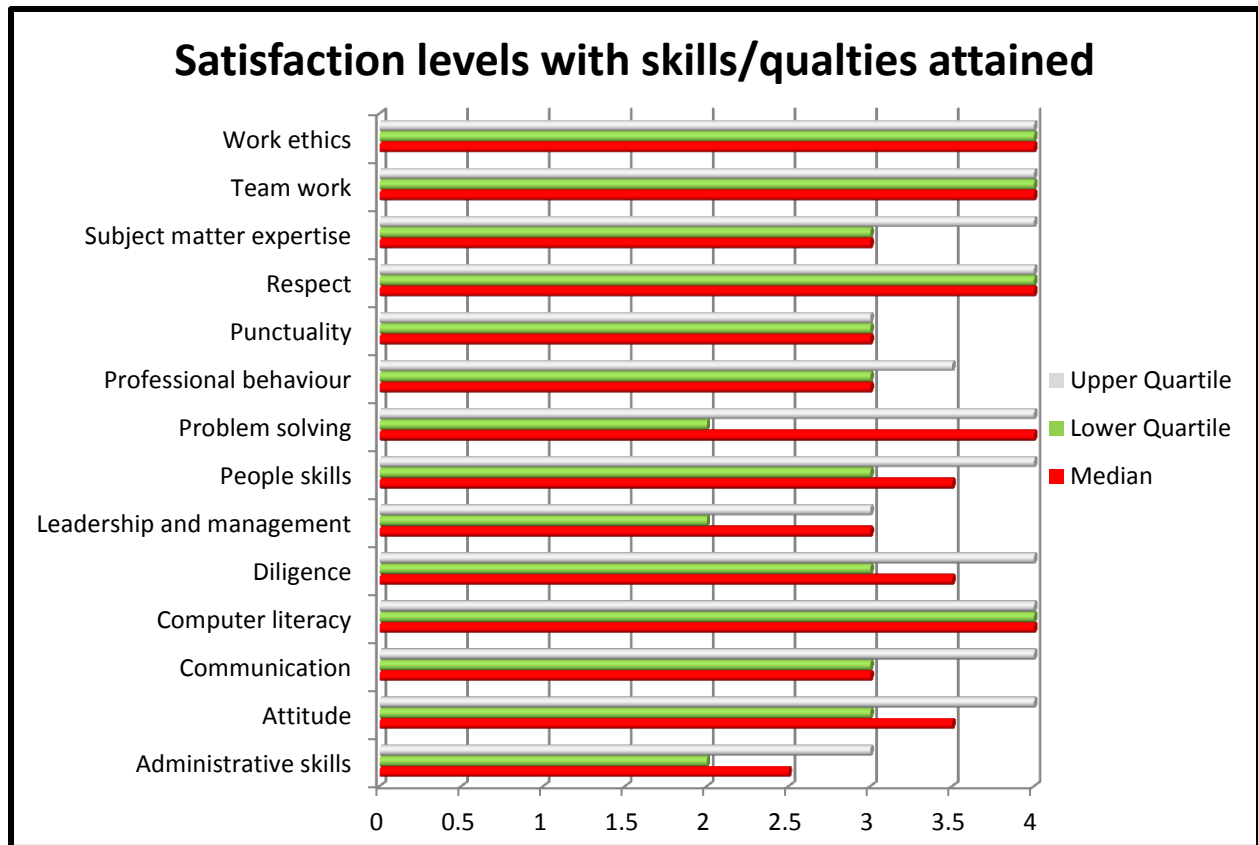
A comparison of the top skills and qualities from both graphs is done in Table 7.1 to identify the ideal bucket of skills and qualities preferred by lecturers:

*Table 7.1: Comparison of skills and qualities*

List of top skills and qualities with a rating of at least 5% (Figure 7.10)		List of the single most important skills and qualities (Figure 7.11)	
Communication	16.92	Subject matter expertise	30.77
Subject matter expertise	15.38	Communication	23.08
Professional behaviour	12.31	Professional behaviour	23.08
Problem solving	10.77	Problem solving	15.38
People skills	9.23	Attitude	7.69
Leadership and management	7.69		
Attitude	6.15		

The five-percent (5%) principle was again applied to the comparison above as an objective measure to be able to determine the top skills and qualities from both lists. The skills and qualities with a rating of at least a 5% in both columns were therefore selected. Lecturers' ideal bucket of skills and qualities are therefore: subject matter expertise, communication, professional behaviour, problem solving and attitude. Problem solving has therefore also been identified to supplement the ideal bucket of skills and qualities required on an institutional level.

How close CUT students are to possessing the ideal bucket of skills and qualities described above can be assessed in terms of the results presented in Figure 7.12.



*Figure 7.12: Lecturers' ratings of skills and qualities attained by students*

Lecturers also had to rate their level of satisfaction with the actual skills and qualities attained by students on a 5-point scale where 1 = poor; 2 = below average; 3 = average; 4 = good and 5 = excellent. The median scores in Figure 7.12 indicate the following rating with regard to the ideal bucket of skills and qualities of lecturers: subject matter expertise: 3; communication: 3; professional behaviour: 3; problem solving: 4 and attitude: 3,5. People skills, which formed part of employers' ideal bucket of skills and qualities required, received a rating of 3,5. Most of these skills and qualities therefore require improvement in the lecturers' view.

A comparison of the ratings of the ideal bucket and skills on an institutional level will only be possible once the ratings of students have also been analysed. Whether lecturers were of the opinion that these skills and qualities should be regarded as a curriculum matter is determined from the analysis presented in Figure 7.13.



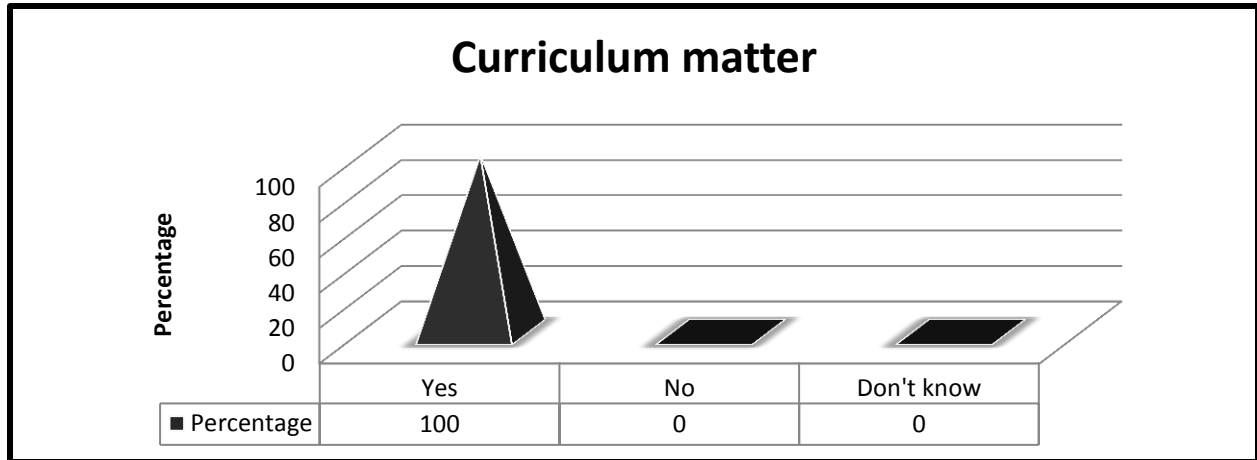


Figure 7.13: Inclusion of skills and qualities identified in the curriculum

Lecturers clearly regard the skills and qualities identified to be a curriculum matter, which also corresponds with the view of employers expressed in this regard. How these skills and qualities should be included in the curriculum is shown in Figure 7.14.

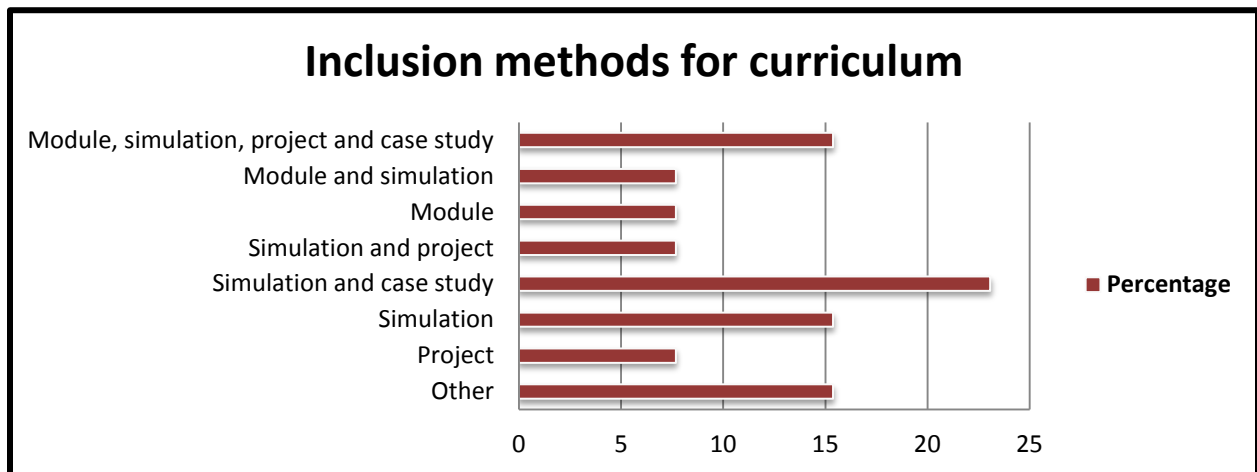
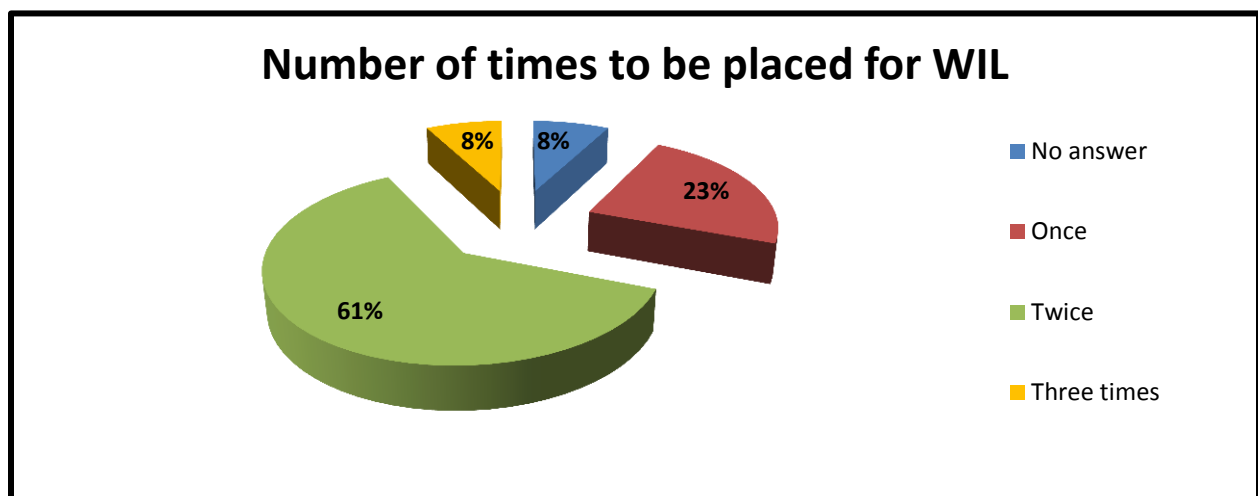


Figure 7.14: Methods for including skills and qualities in the curriculum

Whereas employers preferred singular methods, lecturers were more in favour of combining methods, as can be seen in Figure 7.14, of which a simulation and case study are the most important. A simulation is regarded to be an important method by lecturers due to the presence thereof in all the combinations suggested. Other methods suggested by lecturers were the following:

- The importance thereof in the work situation should be highlighted during each period.
- Monitoring and mentoring in the workplace.
- An enhanced understanding of various applications of technology.

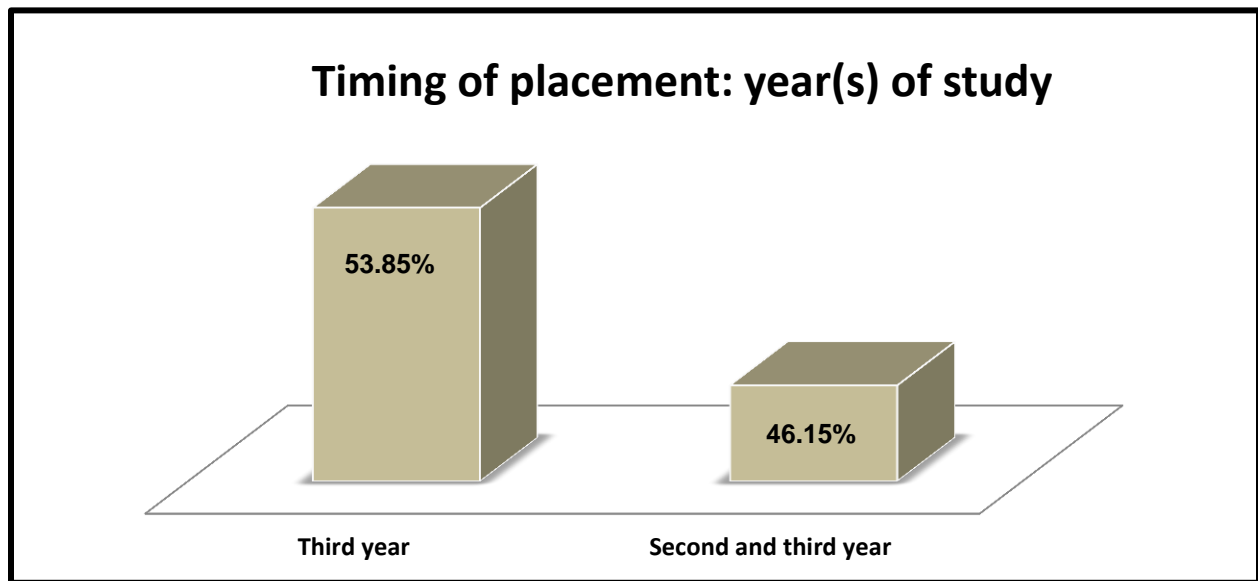
Lecturers were also given the opportunity to provide their ideal structure of a qualification to get the maximum value added through WIL. Due to big differences in the professions the qualifications are aimed at noted during the employers' analysis, a similar variation is expected between faculties and qualifications in this regard. The ideal structure from the lecturers' point of view can be derived from their suggestions as indicated in Figures 7.15–7.18.



*Figure 7.15: The number of times students should be placed over the length of a qualification*

According to lecturers, students should be placed at least once, but preferably twice over the length of a qualification, while being placed three (3) times did not really attract much support. This is in contrast to the view of employers who were of the opinion that a once-off placement was not enough and that students should be placed at least twice, but preferably three (3) times over the length of a qualification. The institutional picture will be completed once the students' views have been analysed as well.

The lecturers' opinions with regard to which year or years of study students should be placed for WIL are shown in Figure 7.16.



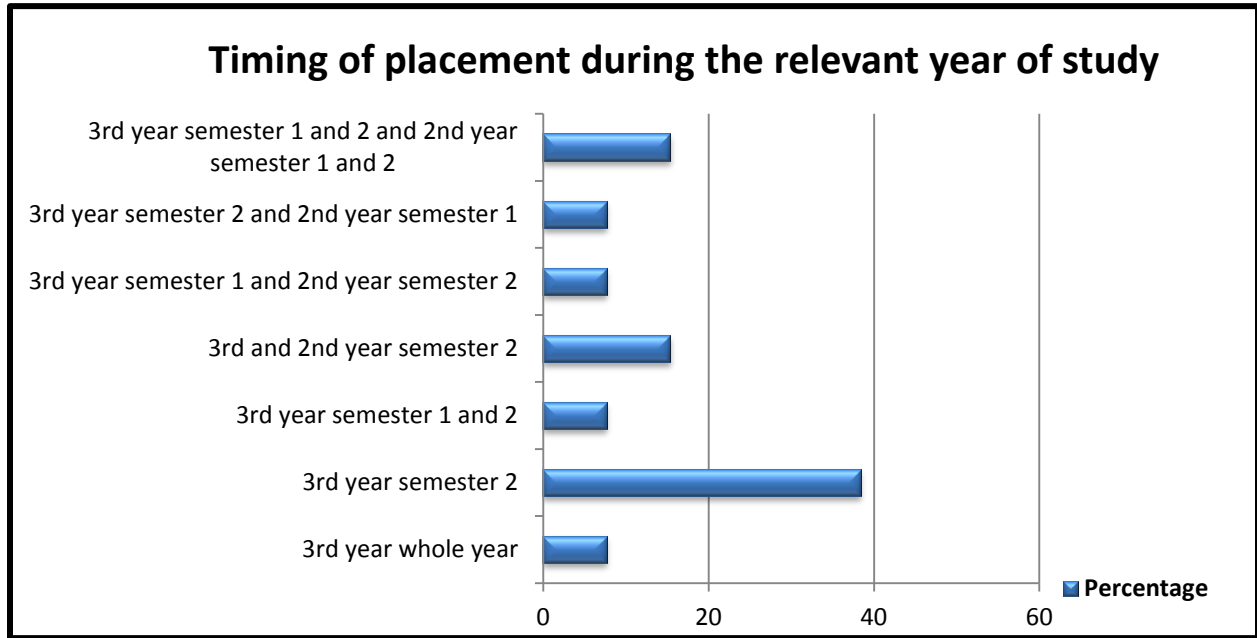
*Figure 7.16: Placements during relevant year(s) of study*

As was noticed with employers, the third year of study is the preferred time of placement, although the placement of students during the second and third year of study was also well supported. In terms of what has already been learned it seems that lecturers share the expectation of employers that students would have gathered more subject matter expertise during their third year, are supposedly more mature and hence more inclined towards displaying the type of conduct required. In the case of lecturers, it could also be due to the general low rating they have attached to students' attainment of the skills and qualities required. The placement of students during their second and third years of study is more aligned though with their preferences that students should be placed at least once, but preferably twice as indicated above. As a result, the following conclusions are made:

- The third year of study (as the preferred time of placement) is the most significant year of placement.
- Students should be placed during the third year when placed once.

- The ideal combination seems to be placement during the second and third year since this combination is aligned with the preference that students should preferably be placed twice.

The choices of lecturers with regard to when students should be placed during the relevant years of study are indicated in Figure 7.17.



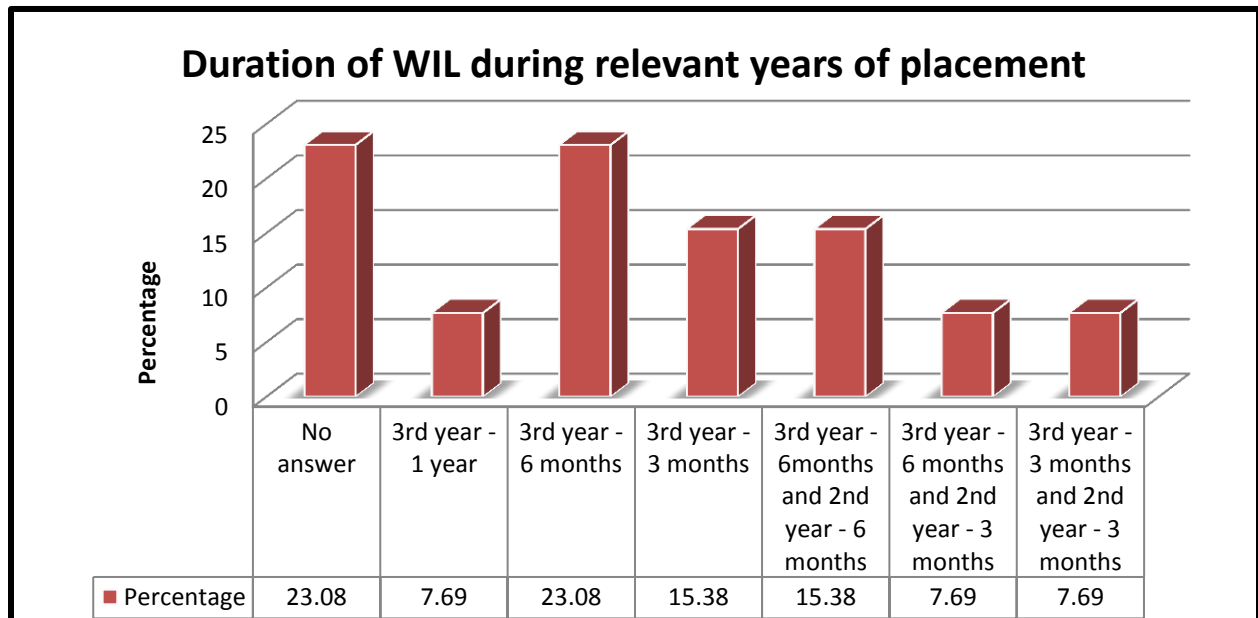
*Figure 7.17: Timing of placements in the relevant years of study selected*

Out of the combinations indicated in Figure 7.17, three (3) combinations that stand out, namely (in ranking order):

- The second semester of the third year (38,46%)
- The second semester of the second and third year (15,38%)
- The first and second semester of both the second and third year (15,38%)

Although the second semester of the third year is clearly preferred most and the first and second semester of both the second and third year received the same support as the second semester of the second and third year, the latter makes the most sense. The conclusion is because this combination is best aligned with the preferences determined

thus far, namely that students should be placed twice during the second and third year of study. The ideal combination for lecturers can therefore be further refined to be the placement of students during the second semester of the second and third year of study. To complete the picture for lecturers with regard to the ideal structure to get the most out of WIL their choices are analysed in Figure 7.18.



*Figure 7.18: Duration of placement during the relevant years of placement*

In assessing the three (3) combinations preferred most in Figure 7.18 against the ideal combination for lecturers established thus far, the number of combinations can be reduced to one (1), namely six (6) months during the second and third year of study. The ideal combination derived from the interpretation of the lecturers' results is thus the placement of students for WIL for six (6) months during the second semester of the second and third year of study.

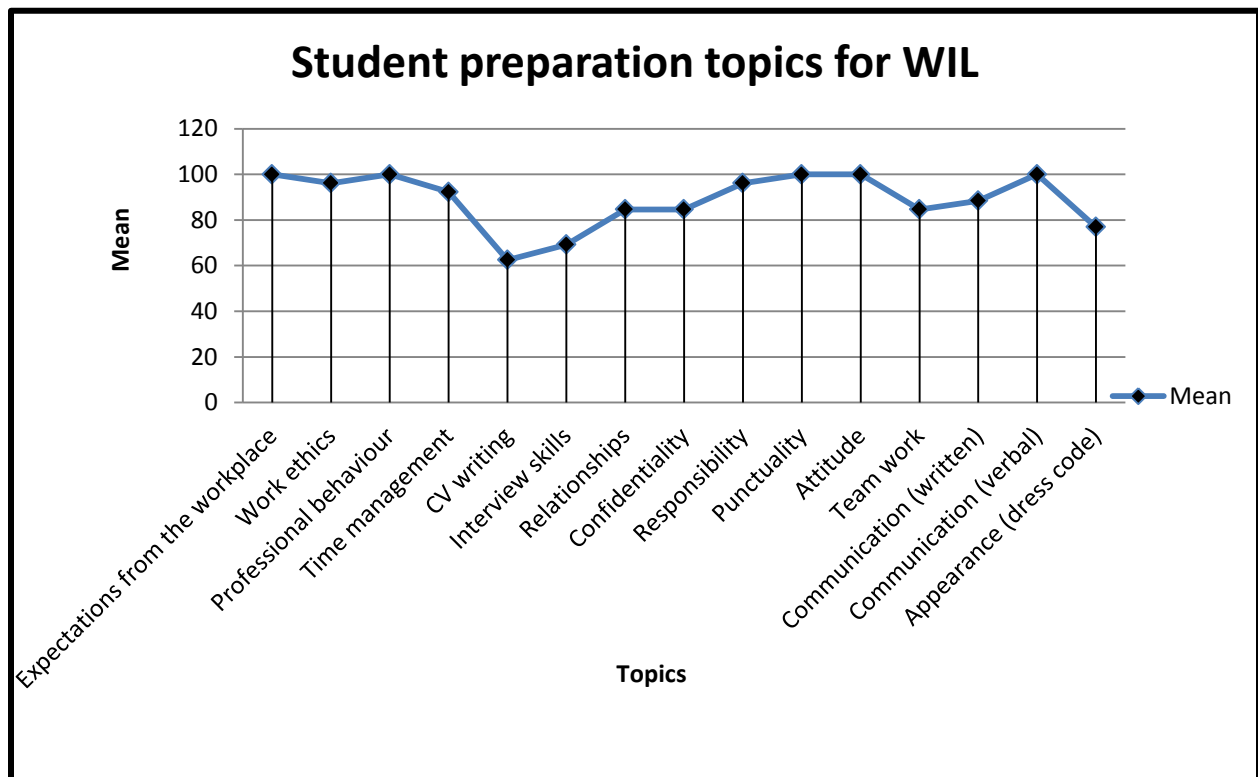
The statistics analysed thus far provide valuable information in respect of the preferences of lecturers and how they relate to the preferences of employers. Lecturers' views concerning the WIL quality cycle will be analysed next.

## **Section C – WIL quality cycle**

A detailed explanation with regard to the rationale for the inclusion of and the methods used to analyse the results of this section of the questionnaire has already been provided in the previous two chapters and is not repeated in the analysis to follow. The same methods of analysis are used to ensure consistency and objectivity.

### **(a) Preparation of students**

The results of responses received in respect of the fifteen (15) topics provided are presented in Figure 7.19, while lecturers' selection of the most important topic is portrayed in Figure 7.20.



*Figure 7.19: Lecturers' rating of student preparation topics for WIL*

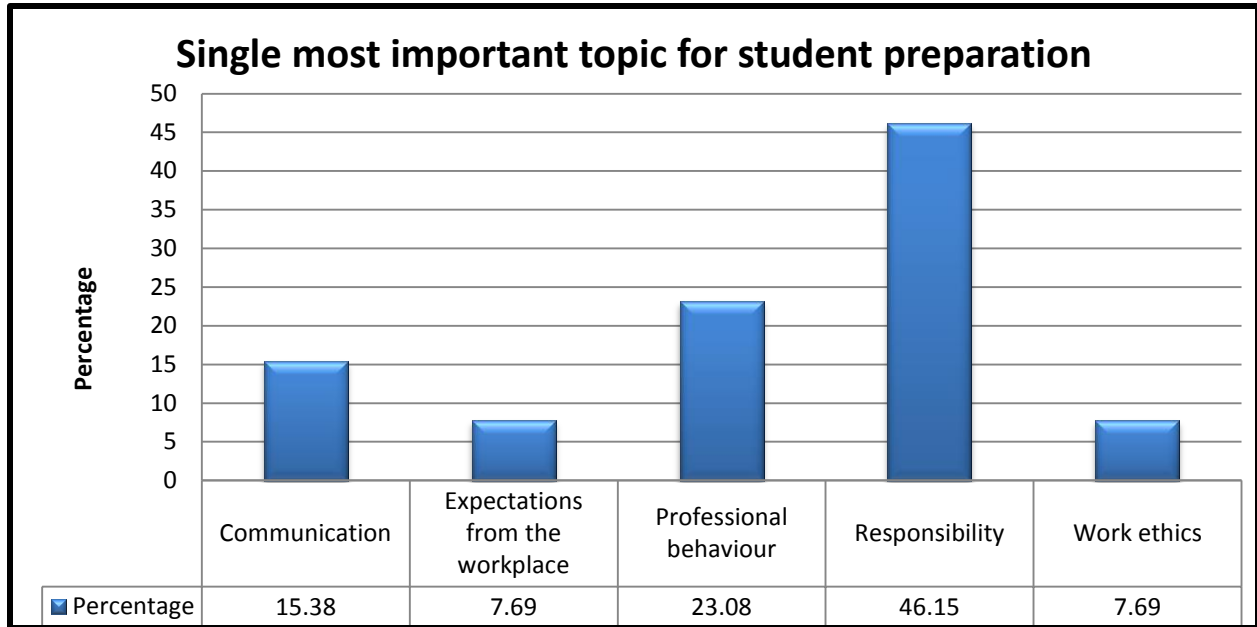


Figure 7.20: Topic selected by lecturers as the most important

A comparison of the top topics selected is provided in Table 7.2 to enable the selection of those topics to be included in the preparation of students for WIL.

Table 7.2: Comparison of student preparation topics for WIL

List of topics selected Figure 7.19	Mean	Most important topic selected Figure 7.20	Percentage
Expectations from the workplace	100	Responsibility	46.15
Professional behaviour	100	Professional behaviour	23.08
Punctuality	100	Communication	15.38
Attitude	100	Expectations from the workplace	7.69
Communication (verbal)	100	Work ethics	7.69

The most important topics to include in the preparation of students for WIL are responsibility, professional behaviour, communication, expectations from the workplace and work ethics. When supplemented in importance from the first column, professional behaviour, communication and expectations from the workplace are of particular

importance. Important to note is that these topics are almost the same as the topics selected by employers, since the only omission is attitude.

(b) Preparation of employers

The lecturers' views regarding what should be done with employers in preparing them for WIL is shown in Figure 7.21.

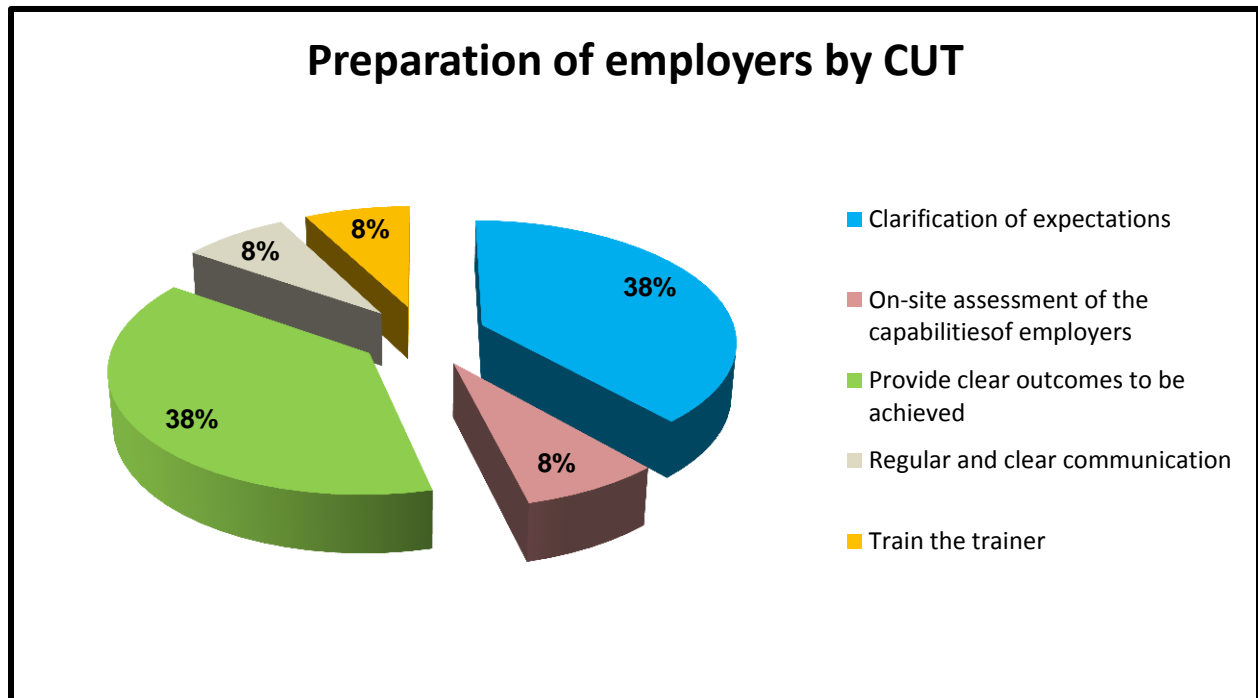


Figure 7.21: Issues to be addressed in preparing employers for WIL

The two dominant issues to emerge from the lecturers' responses are the clarification of expectations and the provision of clear outcomes to be achieved. The following examples provide clarity in terms of the distinction made between these two issues:

- "I've had experience in the past where the students were asked to write e.g. a marketing plan without even knowing the business that well yet."
- "Sometimes employer expectations are extremely high and they end up disappointed."



- “Knowing all the outcomes that students must achieve will enable employers to plan accordingly in order to fulfil the required outcomes for the student.”
- “This will assist the student when they arrive at the hotel since the staff will know which outcomes the student need to achieve.”

This compares well with the more detailed expectations of employers, who indicated the clarification of expectations of all three parties concerned and the need for clearly written outcomes to be achieved. Interesting to note is that no clear additional themes had emerged from the question what could additionally be done, since these responses were more descriptive by nature of the themes identified.

### (c) Placement process

By applying a rating scale of: preferred = 100; useful = 50 and not necessary = 0 points numerical values could be determined in terms of the placement methods listed. Lecturers' preferences for these methods are shown in Table 7.3.

*Table 7.3: Placement methods preferred by lecturers*

Placement methods	Mean
Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer	80.77
Placements to be handled by one representative from CUT	66.67
CV, cover letter and interview, together with a recommendation from CUT	57.69
CV, cover letter and recommendation from CUT	57.69
CV, cover letter and interview	53.85
CV and recommendation from CUT	53.85
CV and interview	50
Students to approach employers on their own with a follow-up done by CUT	37.5

The pertinent issues to emerge from the responses were received are the following:

- Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer is the preferred method of lecturers. Although employers preferred a CV, cover letter and interview, together with a recommendation from CUT as the preferred method to introduce students for placement to them, they were also of the opinion that in the absence of CVs and interviews students could also be allocated by CUT to employers, based on CUT's knowledge of the students and employers.
- Lecturers favour the use of one representative from CUT to deal with placement and are generally not in favour of students approaching employers regarding placement, the exact sentiments expressed by employers.

No significant additional suggestions were made from what is presented above.

(d) Monitoring by the university

The analysis regarding the importance attached to the various monitoring methods listed are indicated in Figure 7.22 and the results of the single most important method selected are displayed in Figure 7.23.

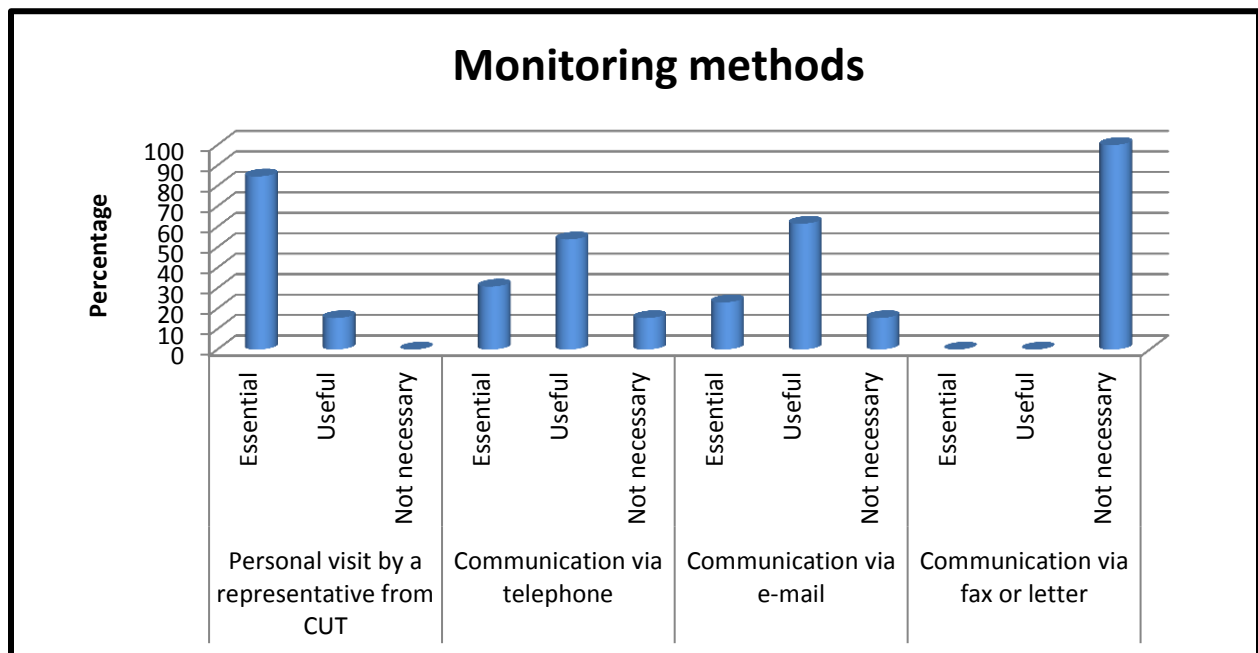
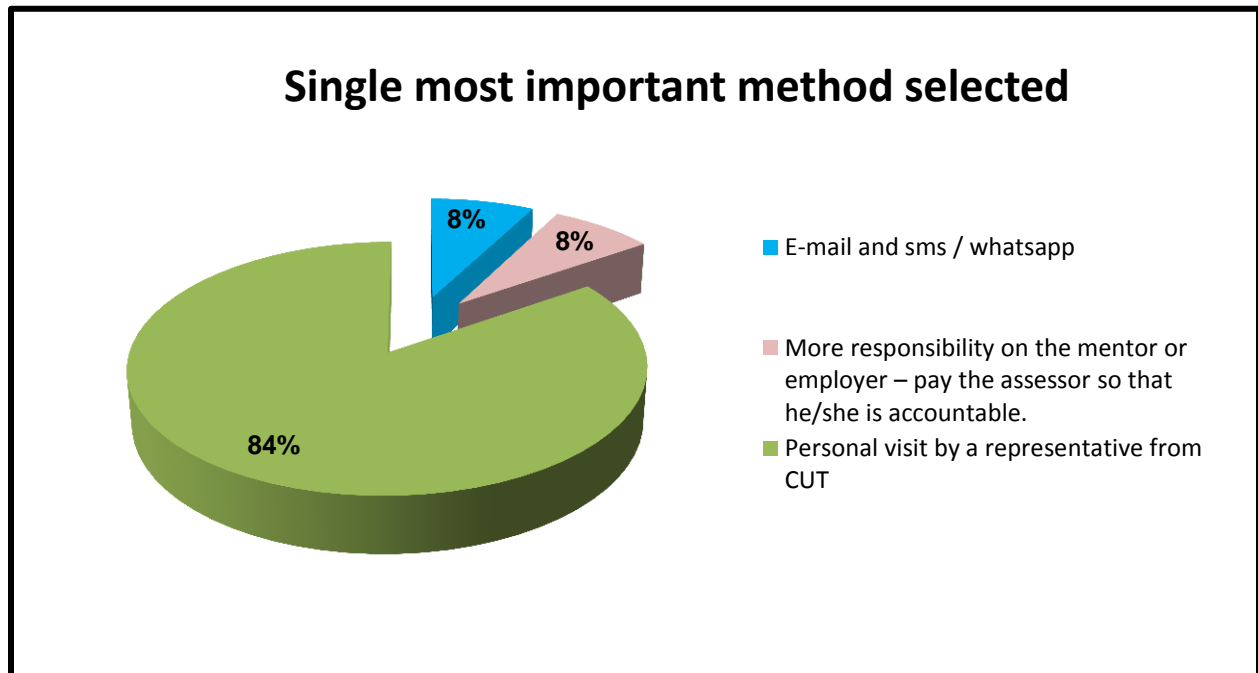


Figure 7.22: Importance of monitoring methods

The monitoring method indicated by lecturers as the most essential is a personal visit by a representative from CUT, while communication via telephone or e-mail was rated more useful than essential. This result is also perfectly aligned with the employers' rating in this regard.



*Figure 7.23: Monitoring method selected as the most important*

A personal visit by a representative from CUT is confirmed to be the most important monitoring method based on the results presented in Figure 7.23. This again corresponds with the view expressed by employers. As indicated above, two (2) additional methods were suggested.

The frequency of contact required with regard to monitoring is shown in Figure 7.24. As was the case with employers, communication via fax or letter is regarded as not necessary. However, it is important to note what is required in respect of personal visits by a representative from CUT as the most important method. Lecturers prefer to do personal visits on either a monthly or a semester basis. The difference is most probably due to different requirements between qualifications. This is seemingly well aligned with

the need of employers, who require personal contact on at least a quarterly or semester basis.

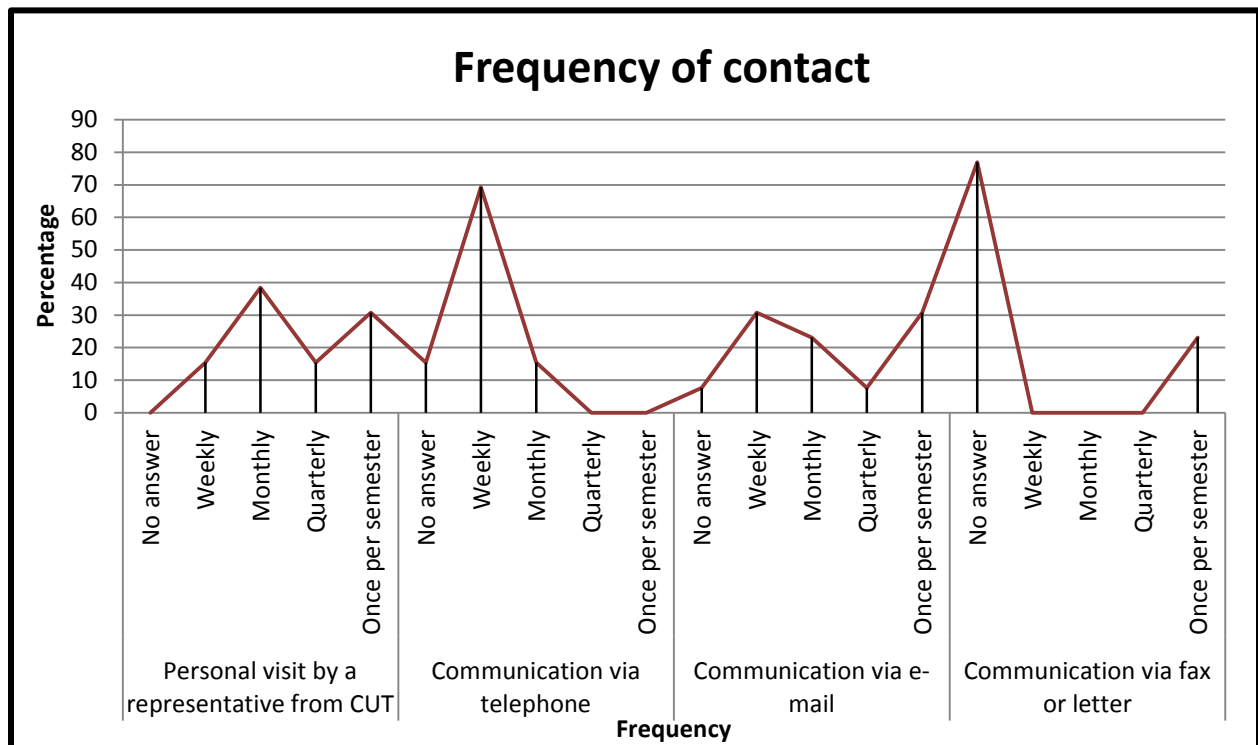
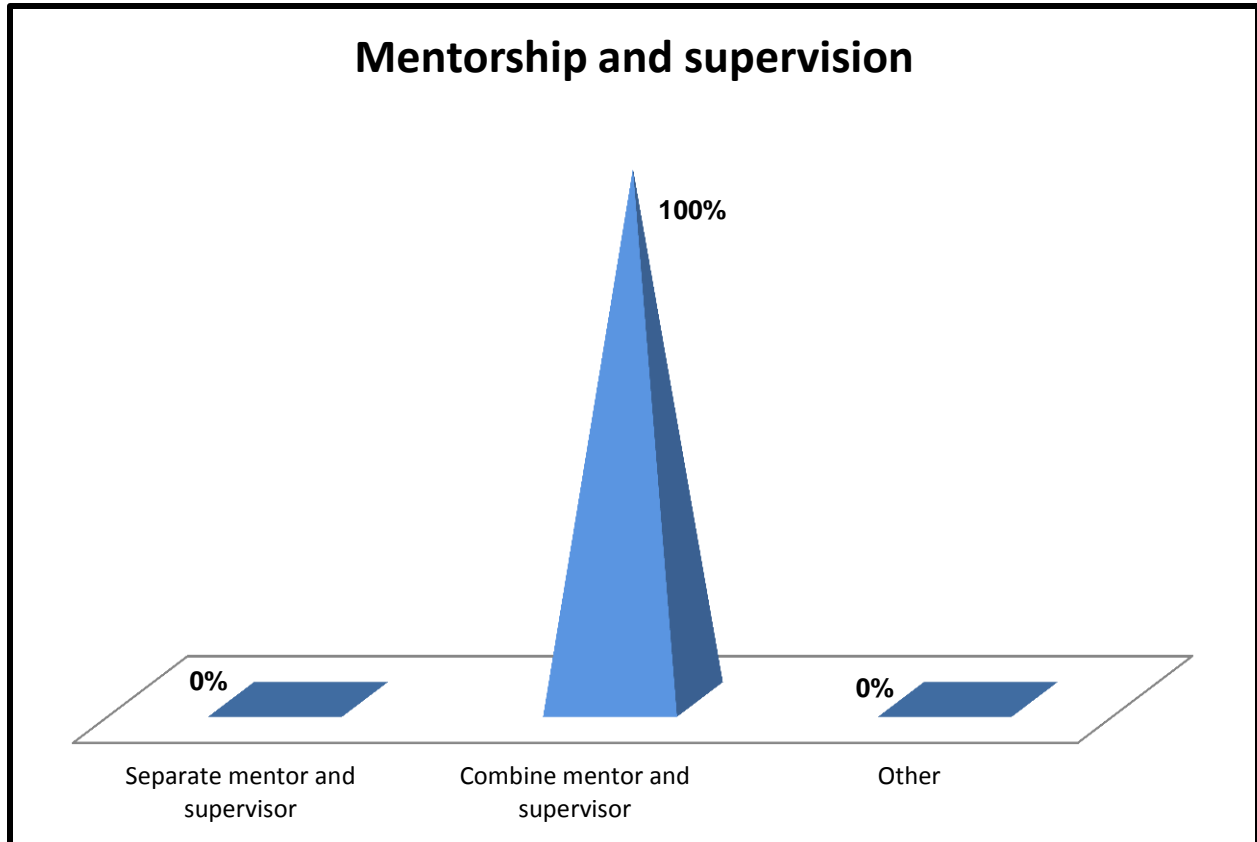


Figure 7.24: Frequency of contact required by lecturers

(e) Mentoring and supervision by employers

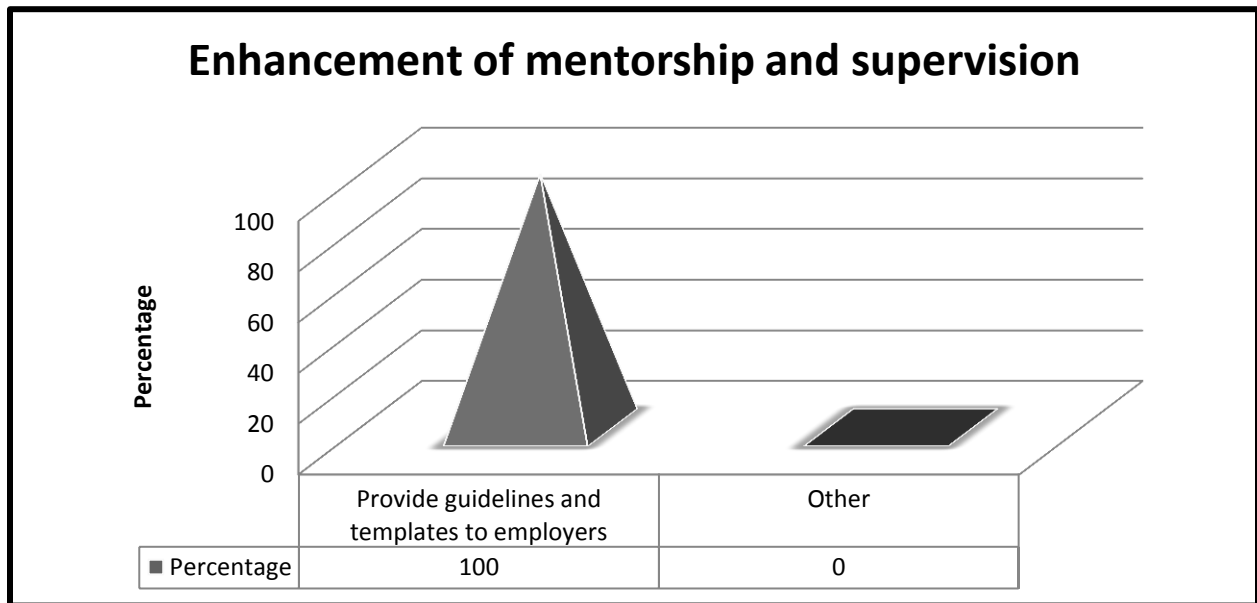
Lecturers' responses to how the mentorship and supervision of students placed for WIL should be done and how to enhance these functions from predetermined lists are indicated in Figure 7.25 and Figure 7.26. The only response received regarding what can additionally be done with mentorship and supervision to enhance the employability of students was an indication that CUT needs to share the responsibility of supervision.



*Figure 7.25: Combinations of mentorship and supervision indicated by lecturers*

Combining mentorship and supervision is clearly the preferred method, based on the results shown in Figure 7.25. Reasons received in this regard are quoted verbatim as follows:

- “Combine mentor and supervisor to enhance consistency.”
- “The employers are under a lot of pressure time-wise. Combining the functions seems better.”
- “Less of a burden on employers and more practical in any case.”



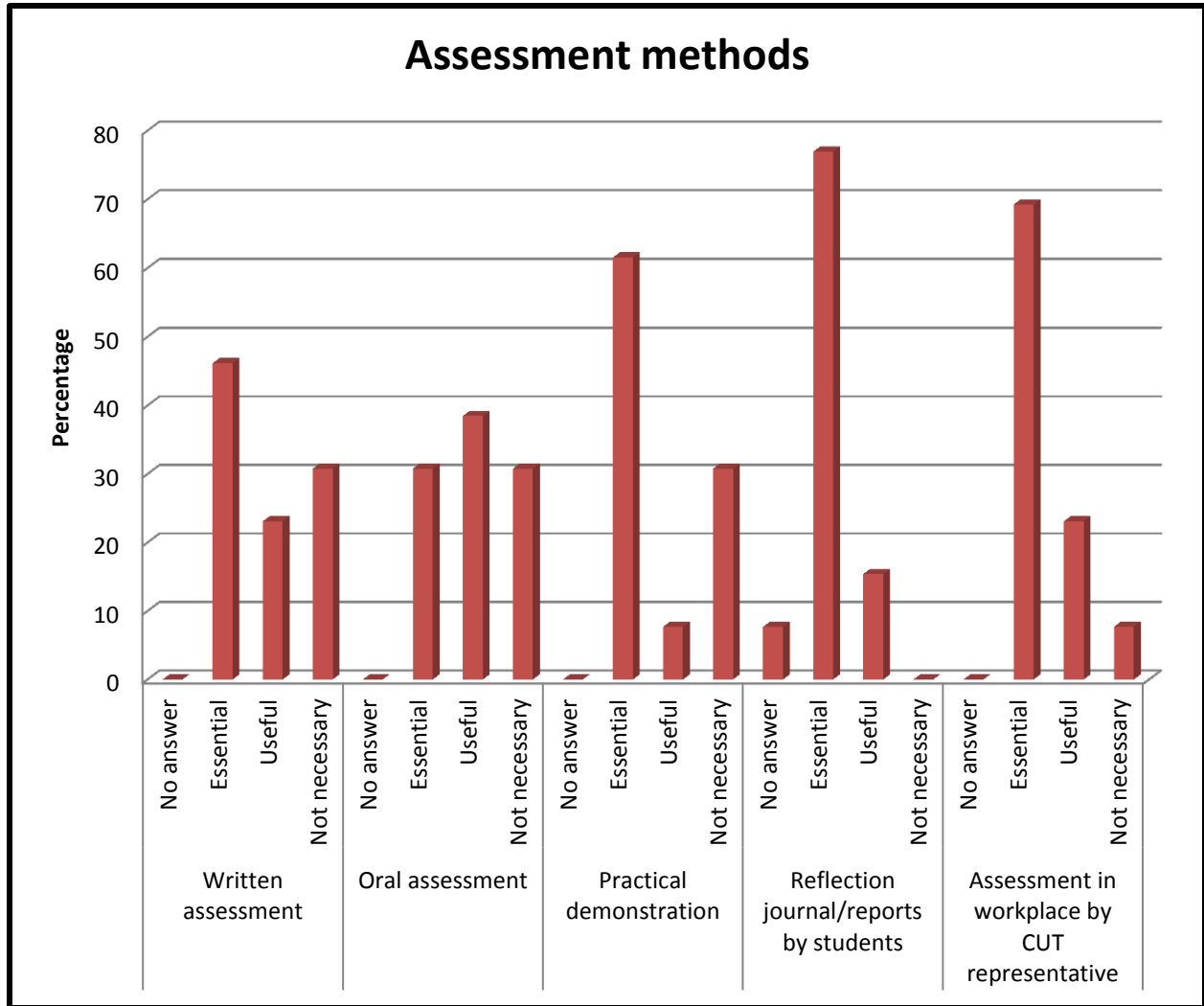
*Figure 7.26: Methods to enhance the functions of mentorship and supervision*

Lecturers were also all in agreement that the functions of mentorship and supervision can be enhanced best by providing guidelines and templates to employers. Examples of explanations received are quoted verbatim below:

- “Guidelines and especially templates will ensure that everyone is on the same page.”
- “Standardised guidelines and templates are easier to understand and implement.”
- “Clarity is achieved and all students are treated equally and consistently.”

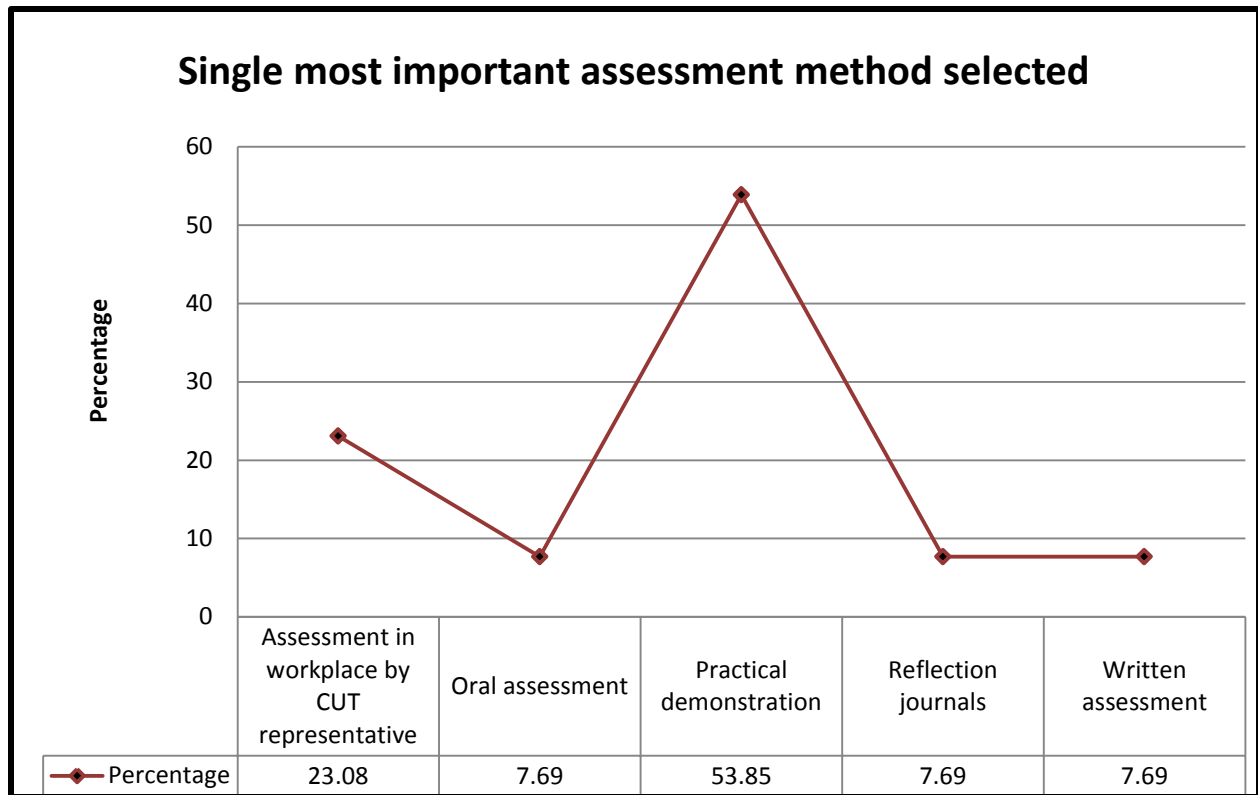
(f) Assessment by the university and employers

The ratings of lecturers with regard to the essentialness of the assessment methods listed are indicated in Figure 7.27. Their selection of the method they regard to be the most important is shown in Figure 7.28. The frequency with which assessment should be done according to lecturers is displayed in Figure 7.29.



*Figure 7.27: Assessment methods regarded by lecturers as essential*

Seen as a whole, the results indicate that most of the assessment methods listed were regarded as essential, with only an oral assessment being regarded as more useful than essential. The method regarded to be the most important is shown in Figure 7.28.



*Figure 7.28: Assessment method selected as the most important*

As indicated in Figure 7.28, a practical demonstration is regarded to be the single most important assessment method by lecturers, while an assessment in the workplace is also regarded to be important.

Preferences in terms of the frequency of assessment required by lecturers are shown in Figure 7.29. The interesting statistic to note is how regular lecturers prefer that assessment should occur. Apart from an assessment in the workplace, which is suggested to be quarterly, all the other methods of assessment need to be done in intervals of either a month or a week. A conclusion to be drawn from these statistics is that students should first do a practical demonstration, then talk about what they have learned, followed by writing down and reflecting on what they have learned before they are assessed in the workplace by CUT.



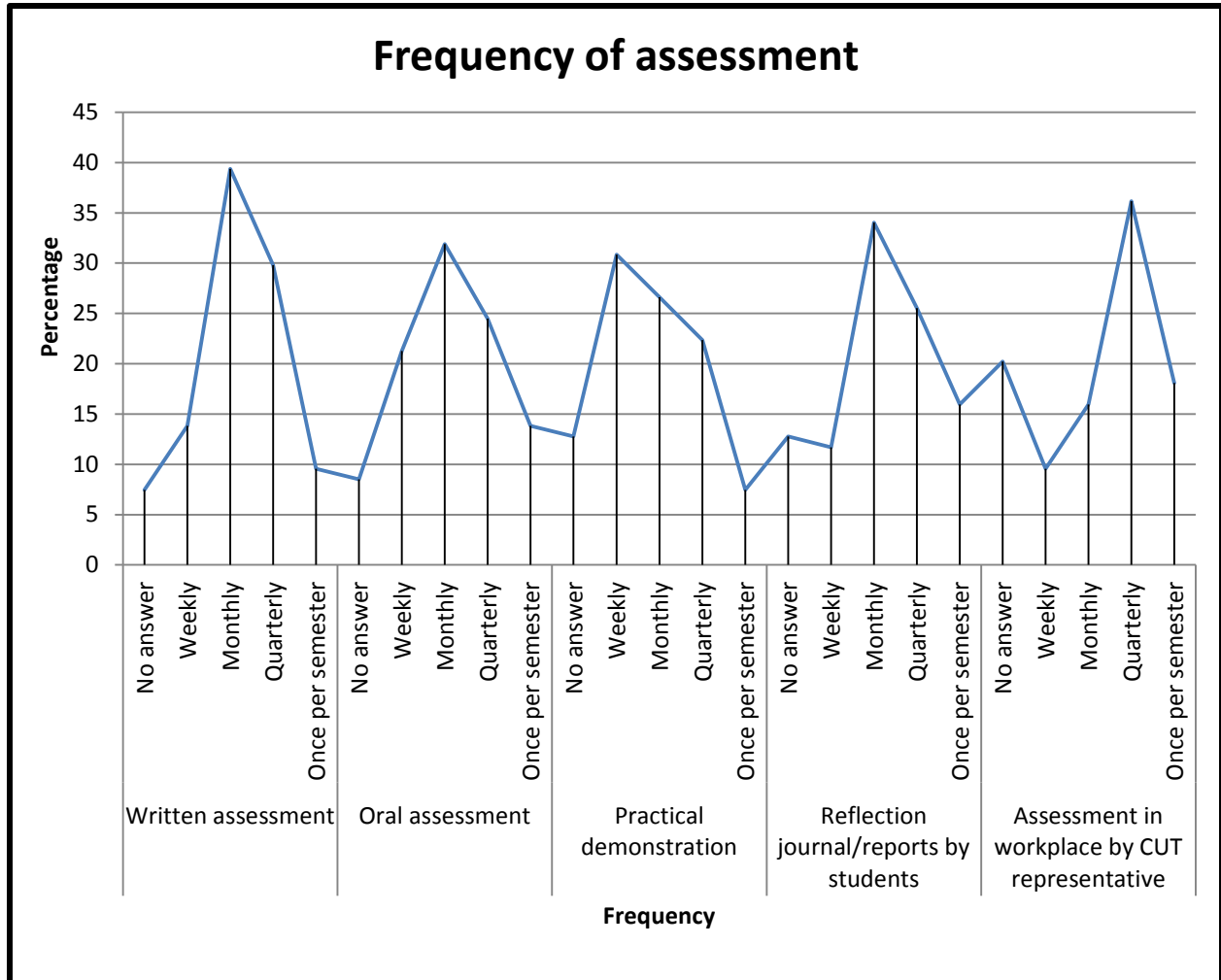


Figure 7.29: Frequency of assessment required by lecturers

#### (g) Debriefing

Similar to the information required in respect of assessment methods, lecturers were also requested to indicate which of the debriefing methods listed in the questionnaire they regarded to be essential. They also had to select the single most important debriefing method from this list. An indication of the frequency of debriefing required had to be indicated as well. An analysis of the information provided by lecturers in this regard is shown in Figures 7.30–7.32 below.

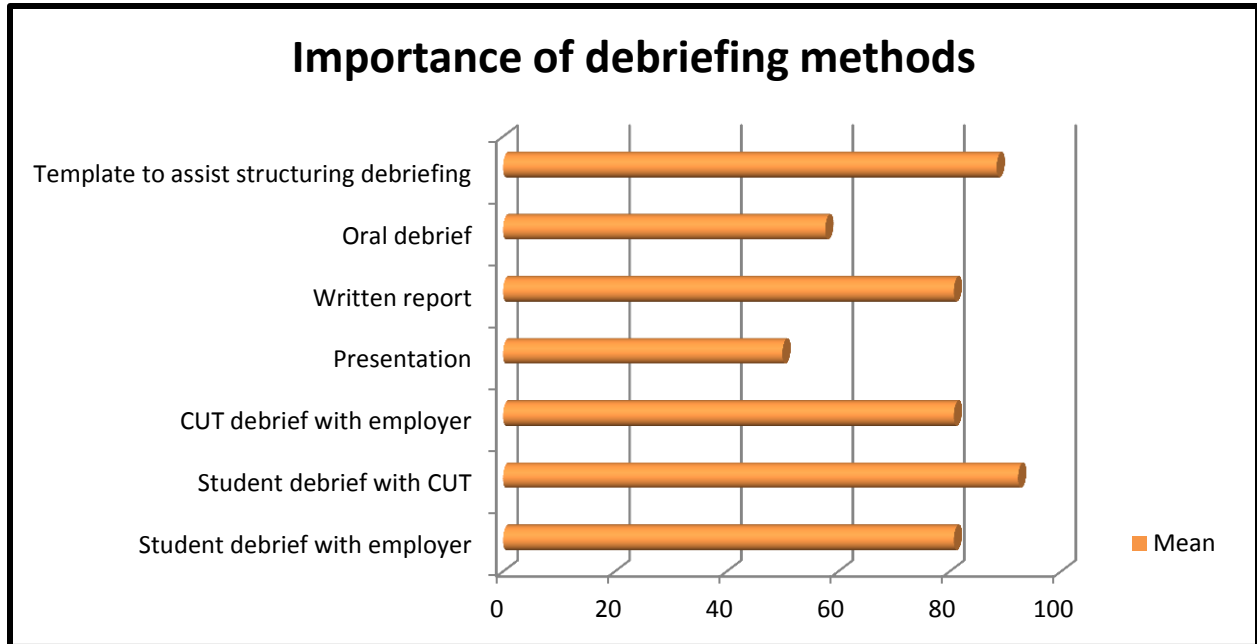


Figure 7.30: Debriefing methods regarded by lecturers as essential

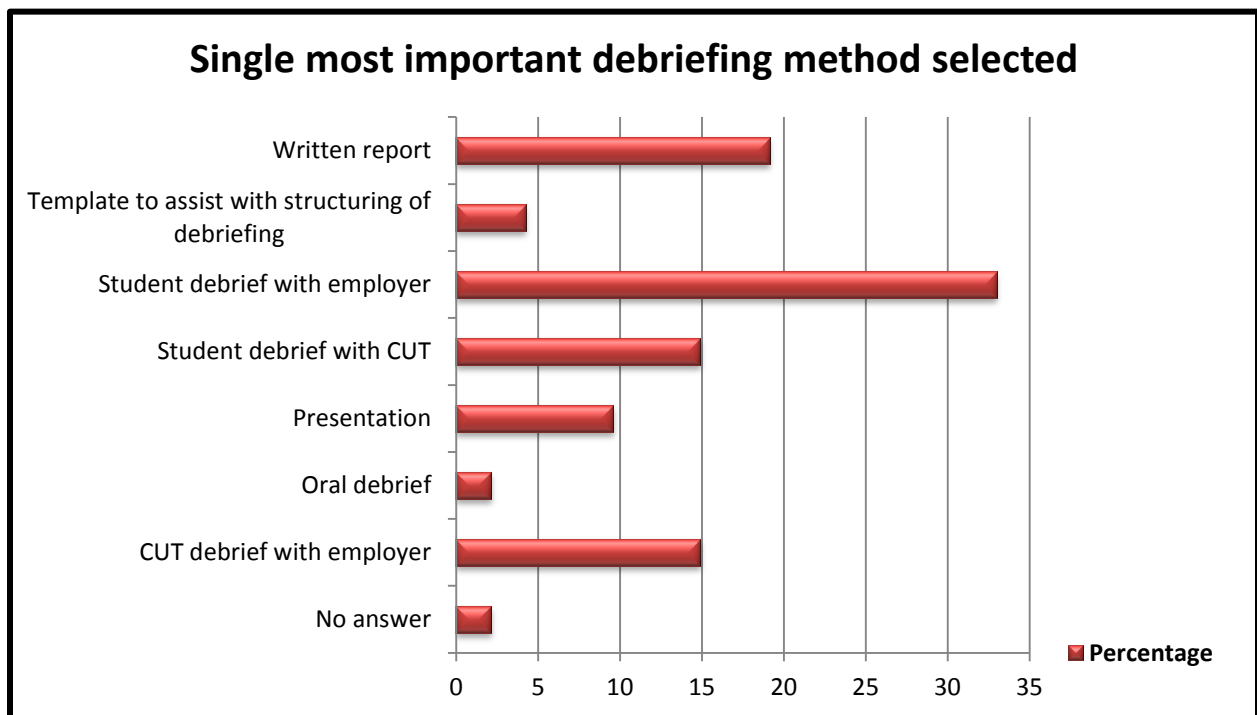
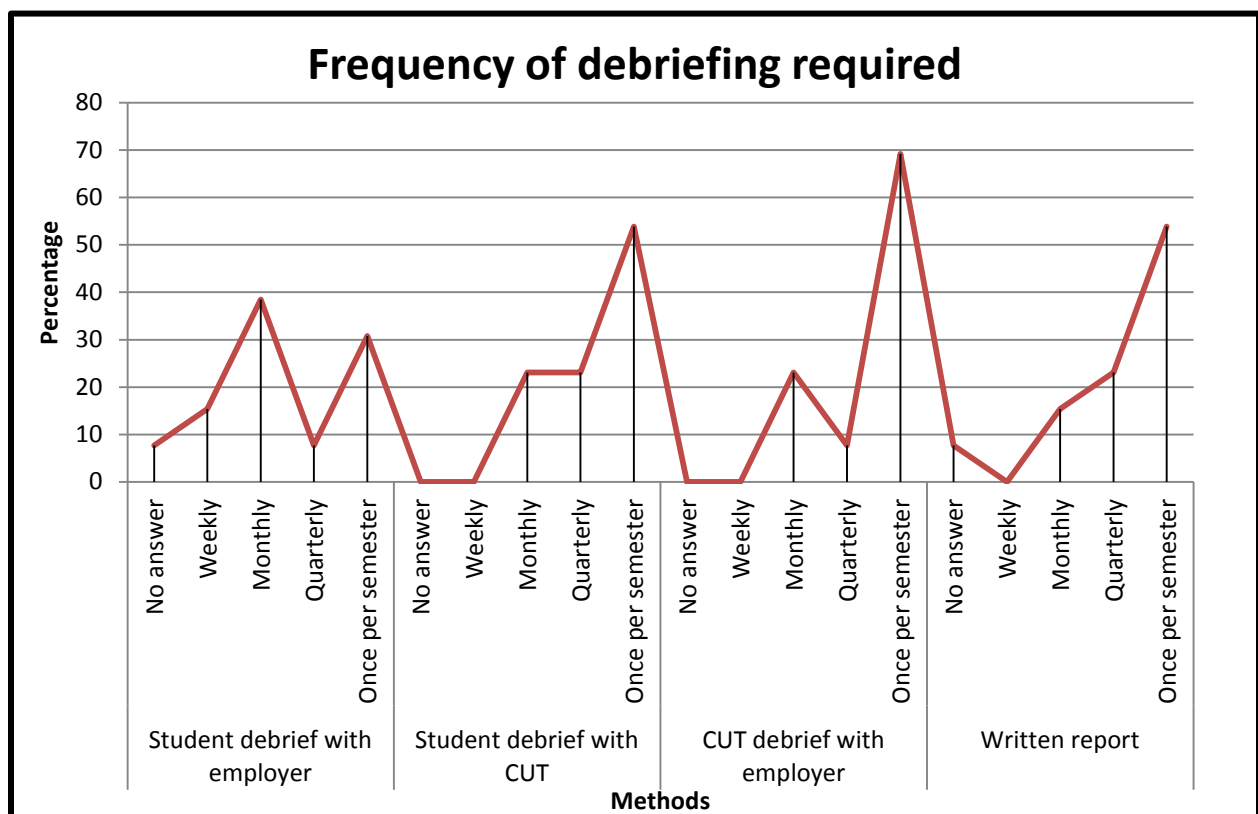


Figure 7.31: Debriefing method selected by lecturers as the most important

The results displayed in Figures 7.30 and 7.31, respectively confirm the centrality of students in the debriefing process. As was the case with employers, a student debrief

with CUT is regarded as the most essential and a student debrief with an employer is regarded to be the most important. There were variances though in the ranking order of what was regarded as essential and most important. As an example, a written report was the third-most essential method, but selected as the second most important. Seen collectively, the methods with the highest combined ratings were a student debrief with an employer, a student debrief with CUT, a CUT debrief with an employer and a written report. These methods are therefore focused on in analysing the frequency of debriefing required in Figure 7.32.



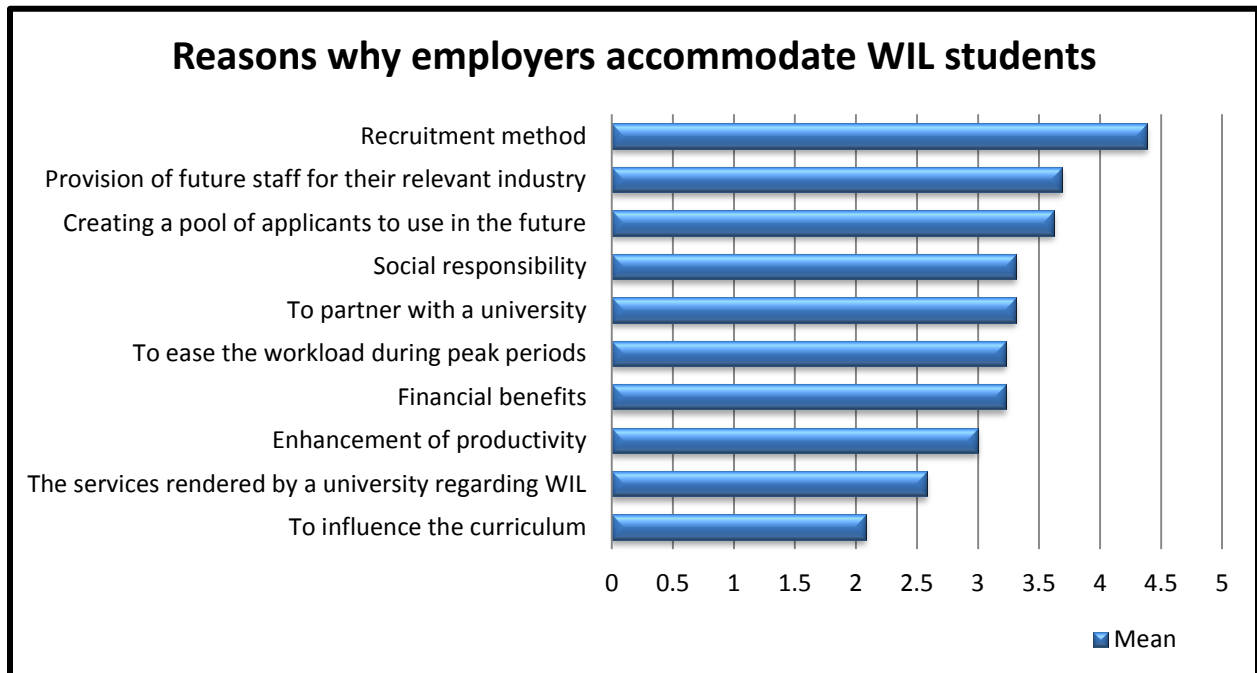
*Figure 7.32: Frequency of debriefing required by lecturers*

In terms of the results presented above it is clear that lecturers view debriefing as a process that need not occur as often as monitoring or assessment, based on their indications in Figure 7.32 that debriefing is mostly required on a semester basis.

## **Section D – General issues related to WIL**

Lecturers' responses to the list of statements regarding why employers accommodate students for WIL are indicated in Figure 7.33, while their indications of the most important reason in this regard are shown in Figure 7.34.

As can be seen in Figure 7.33 and Figure 7.34 below, lecturers are of the opinion that employers' involvement in WIL is primarily based on using WIL as a recruitment method. This view is supported by the fact that lecturers either agreed or strongly agreed with this statement, as indicated in Figure 7.33, and that it was selected by lecturers as the single most important reason they thought employers accommodated students for WIL in Figure 7.34. The provision of future staff for their relevant industry and creating a pool of applicants to use in future were also ranked second and third in both figures, while social responsibility was ranked fourth. It is therefore not necessary to do further comparisons in a table to determine that these are the four (4) reasons why employers accommodate students for WIL according to lecturers.



*Figure 7.33: Lecturers' reasons why employers accommodate students for WIL*

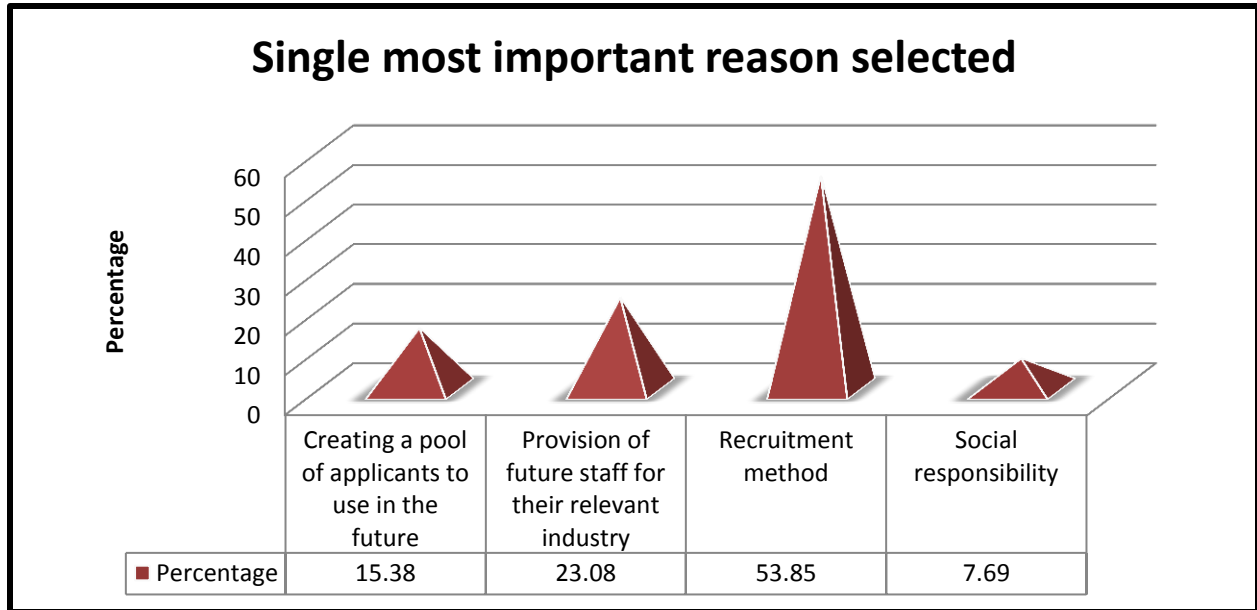


Figure 7.34: Reason selected by lecturers as the most important why employers accommodate students for WIL

The results in Figure 7.35 below indicate lecturers' responses to whether they thought employers would prefer to permanently appoint students in their organisations who had completed WIL as opposed to students who did not complete WIL.

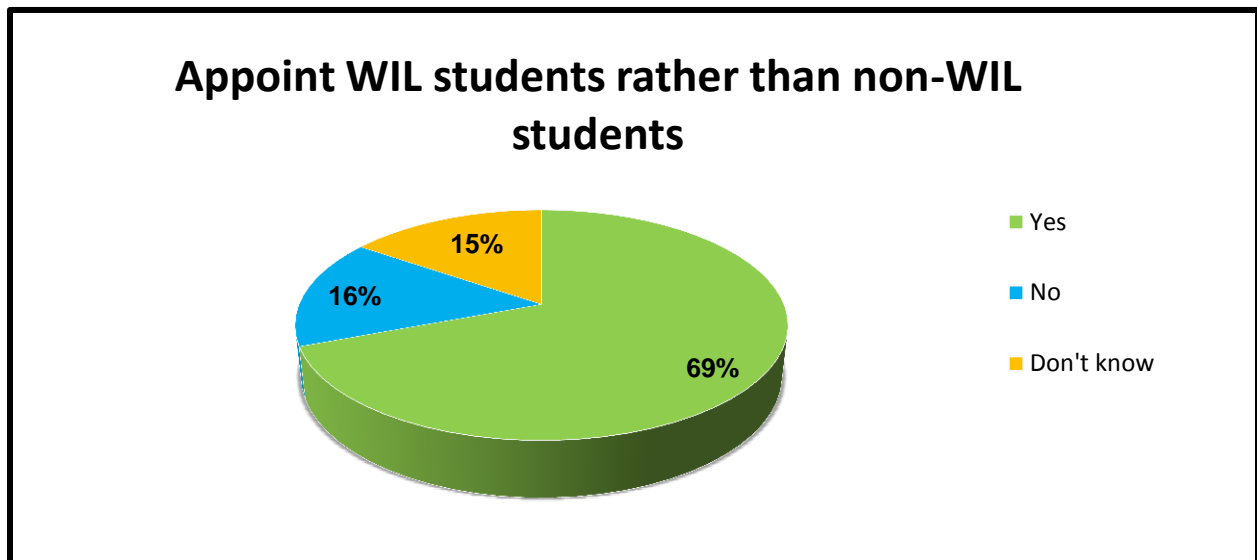


Figure 7.35: Preference to appoint WIL students rather than non-WIL students

It is clear from the statistics in Figure 7.35 that lecturers are of the opinion that employers would prefer to appoint WIL students rather than non-WIL students. It is interesting to note, though, that lecturers are not as convinced as employers were in this regard, since 92% of employers indicated that they would prefer WIL students. The reasons why lecturers were not as convinced as employers are the following:

- “Employers will still appoint the best candidates for their needs.”
- “That will depend on a lot of individual factors.”
- “All permanent appointments of teachers can only be done with a professional teaching qualification – which includes WIL.”

What would be of further interest is to see what the preference bias of employers for WIL students is in lecturers’ opinion. These reasons are displayed in Figure 7.36.

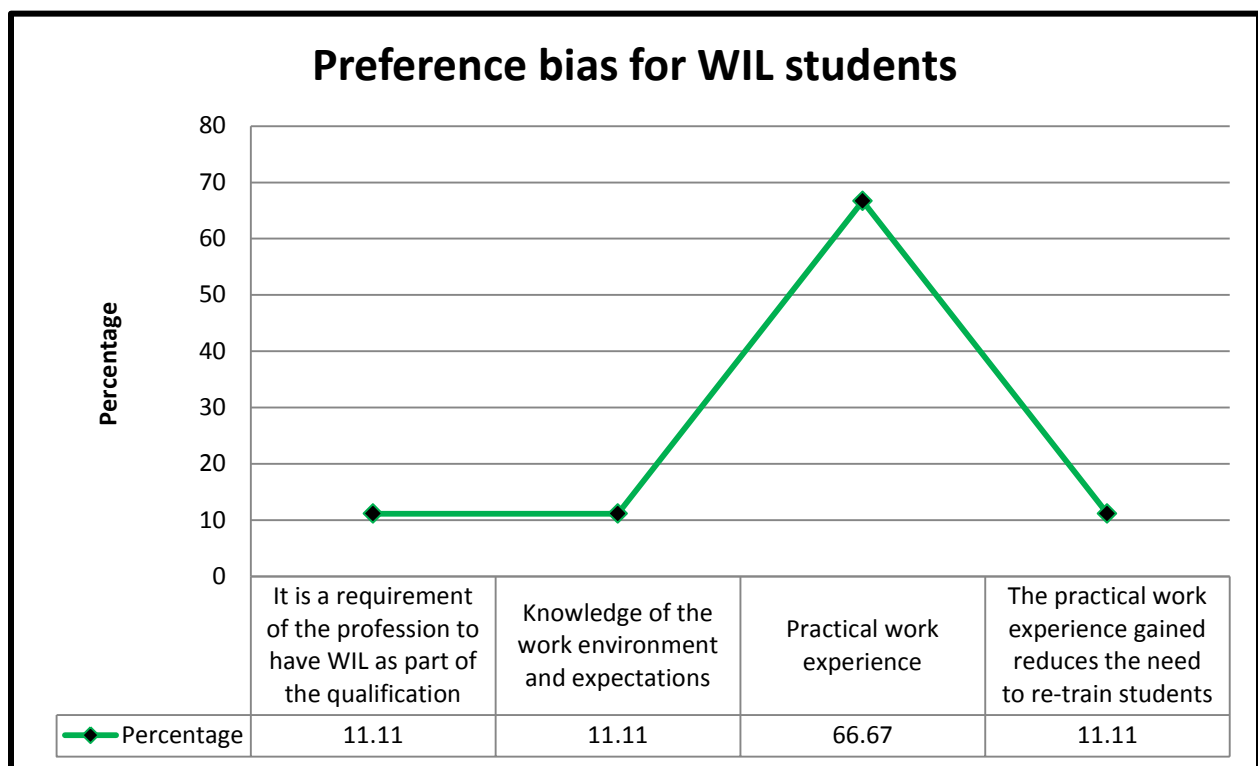


Figure 7.36: Reasons for employers’ preference bias for WIL students, according to lecturers

Practical work experience is the standout reason provided by lecturers for employers' preference bias for WIL students as indicated in Figure 7.36. Except for the reason regarding the requirement of the relevant profession to have WIL as part of the qualification (and the reason could possibly be that without WIL students are not adequately prepared for the work environment), the reasons indicated are in alignment with the reasons provided by employers.

Lecturers' views regarding what specifically about WIL enhances the employability of students are presented in Figure 7.37.

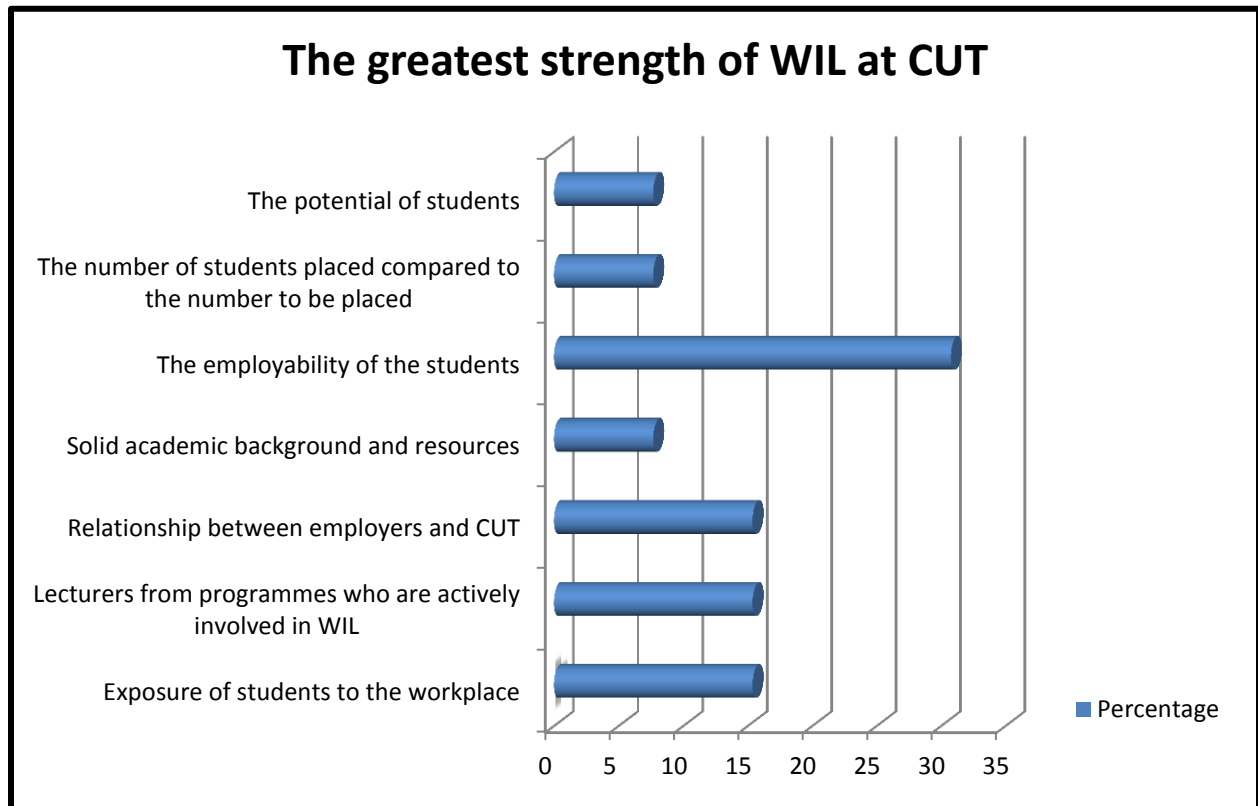


*Figure 7.37: Specific reasons why WIL enhances employability, according to lecturers*

The three most important reasons indicated in Figure 7.37 are being better prepared and equipped for the working world, the practical application of knowledge and time to assess a future employee, and reducing risks with new appointments. These reasons also correspond well with the reasons provided by employers in Figure 6.33.

## **Section E – SWOT analysis**

Lecturers' opinions regarding the greatest strengths, weaknesses, opportunities and threats for WIL at CUT are shown below in Figures 7.38–7.41. A SWOT template (Table 7.4) is used to present a summary of the most pertinent issues and trends identified.



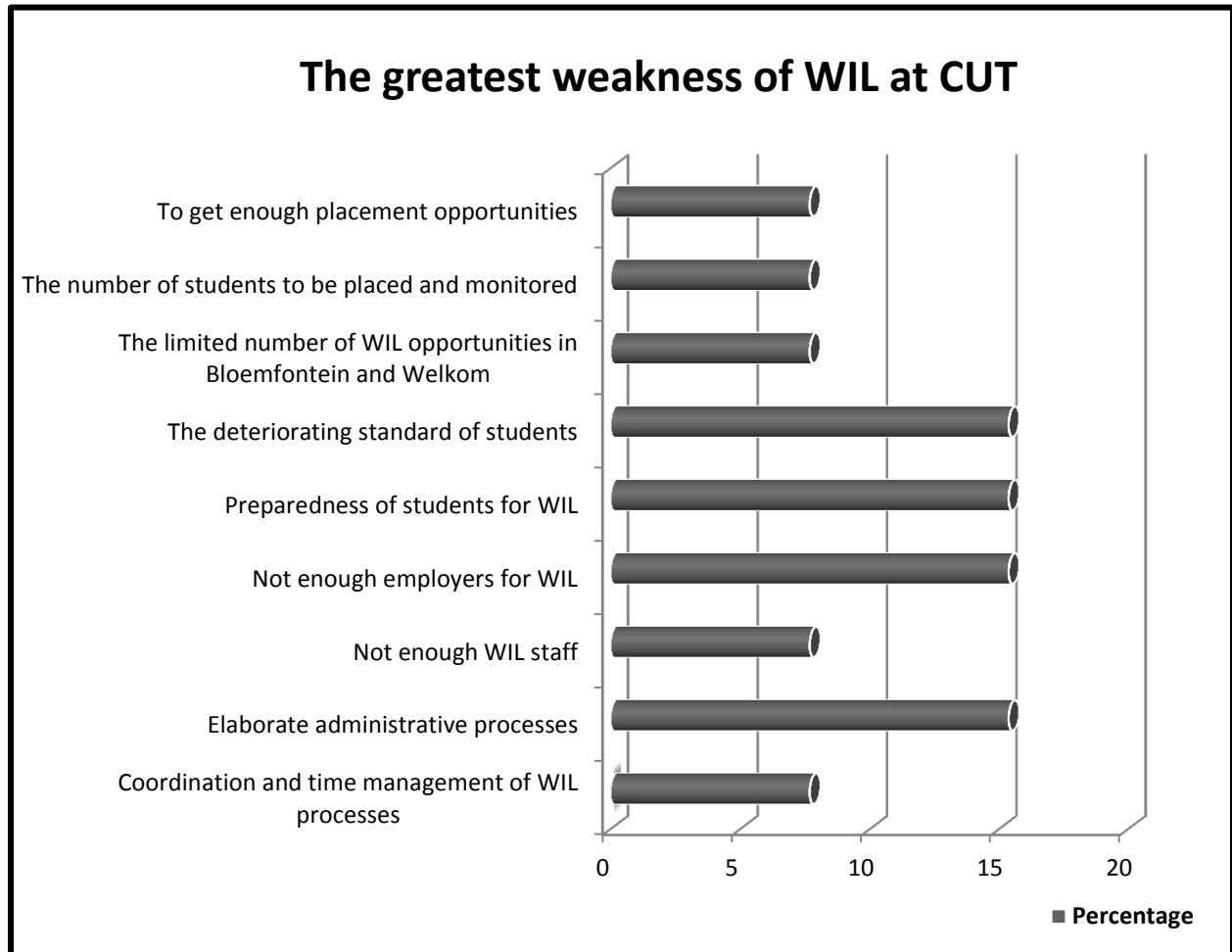
*Figure 7.38: The greatest strength of WIL at CUT, according to lecturers*

The three greatest strengths of WIL at CUT according to lecturers are:

- The employability of the students.
- Exposure of students to the workplace.
- Lecturers from programmes who are actively involved in WIL.
- Relationship between employers and CUT.



Interesting to note from this analysis is the inclusion of all three (3) stakeholders. Whether any weaknesses are revealed regarding the stakeholders is shown in Figure 7.39.



*Figure 7.39: The greatest weakness of WIL at CUT, according to lecturers*

According to lecturers, the greatest weaknesses of WIL at CUT are the following:

- Elaborate administrative processes.
- Not enough employers for WIL.
- Preparedness of students for WIL.
- The deteriorating standard of students.

These weaknesses with regard to students were also indicated by employers as the level of preparation of students for WIL and the calibre of students placed. Should these weaknesses also provide opportunities for WIL at CUT is indicated in Figure 7.40.

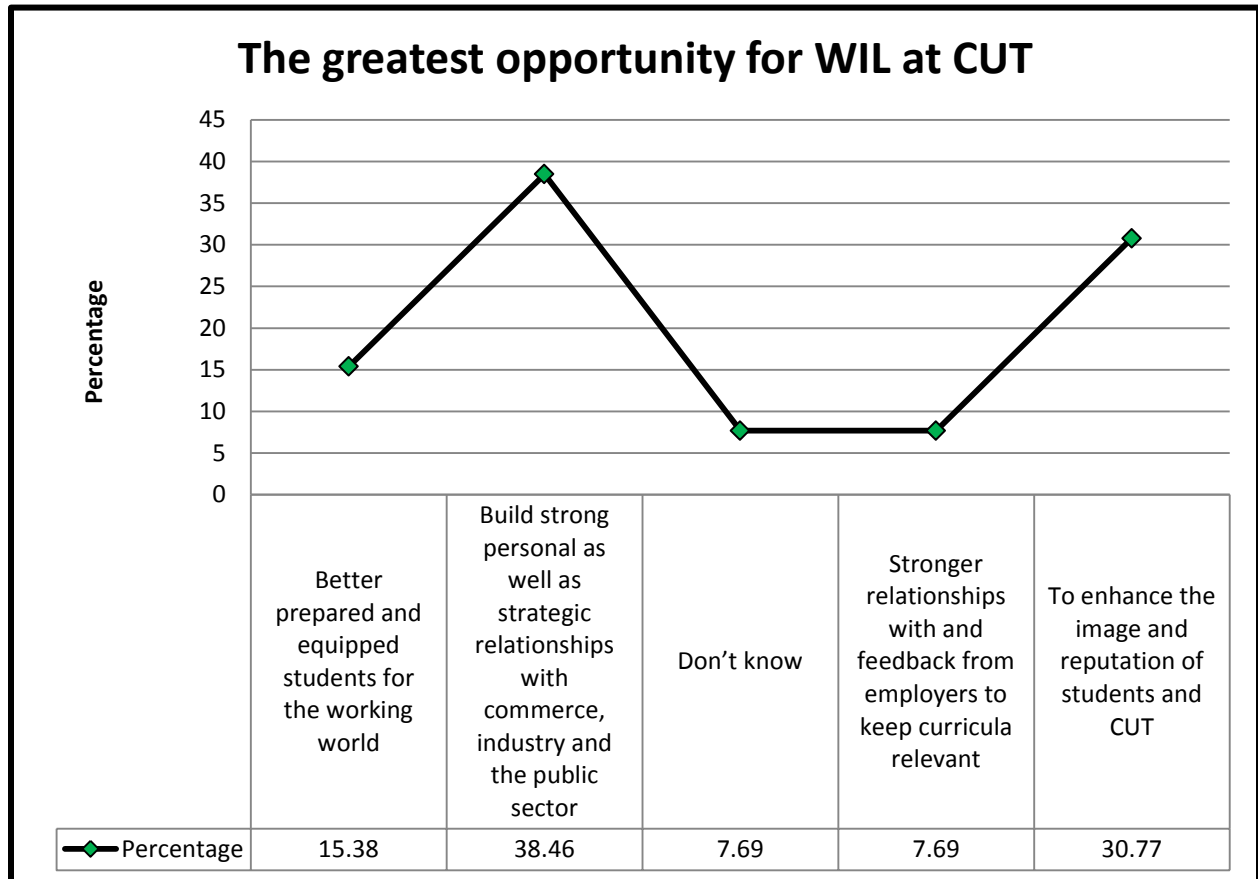
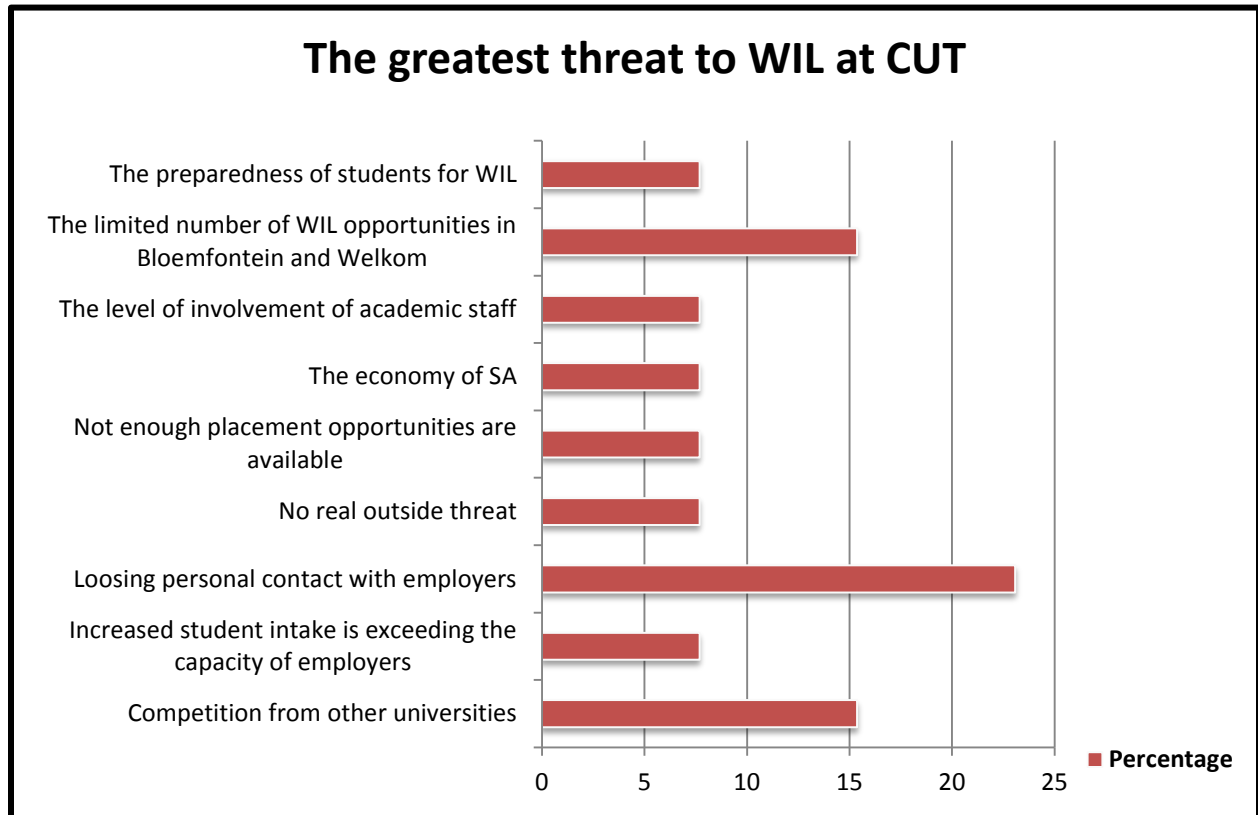


Figure 7.40: The greatest opportunity for WIL at CUT, according to lecturers

The greatest opportunities for WIL at CUT according to lecturers are to be found in the following:

- Build strong personal as well as strategic relationships with commerce, industry and the public sector.
- To enhance the image and reputation of students and CUT.
- Better prepared and equipped students for the working world.

In addition to turning the preparation of students into a positive, the views of lecturers and employers were also the same with regard to the opportunities for WIL at CUT. The views of lecturers in respect of threats to WIL at CUT are presented in Figure 7.41.



*Figure 7.41: The greatest threat to WIL at CUT, according to lecturers*

The greatest threats to WIL at CUT have been indicated by lecturers as the following:

- Losing personal contact with employers.
- Competition from other universities.
- The limited number of WIL opportunities in Bloemfontein and Welkom.

The main issues and trends identified are summarised in Table 7.4.

Table 7.4: SWOT analysis of lecturers

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• The employability of the students</li> <li>• Exposure of students to the workplace</li> <li>• Lecturers from programmes who are actively involved in WIL</li> <li>• Relationship between employers and CUT</li> </ul>	<ul style="list-style-type: none"> <li>• Elaborate administrative processes.</li> <li>• Not enough employers for WIL</li> <li>• Preparedness of students for WIL</li> <li>• The deteriorating standard of students</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Build strong personal as well as strategic relationships with commerce, industry and the public sector</li> <li>• To enhance the image and reputation of students and CUT</li> <li>• Better prepared and equipped students for the working world</li> </ul>	<ul style="list-style-type: none"> <li>• Losing personal contact with employers</li> <li>• Competition from other universities</li> <li>• The limited number of WIL opportunities in Bloemfontein and Welkom</li> </ul>

### 7.3 SUMMARY OF PERTINENT ISSUES AND TRENDS REGARDING LECTURERS

A summary of all the pertinent issues and trends identified with regard to lecturers is provided per section below.

#### **Section A – WIL rationale**

- An overall response rate of 86,7% was achieved with responses received for relevant qualifications in every faculty.
- The WIL experience of seven years of lecturers is closely correlated with the six (6) years' experience of employers. This makes their inputs comparable with employers from an experience and insight points of view, although vastly different

in terms of work environment and stakeholder perspectives, which provides a broader scope and depth of opinions.

- The preparation of students for the work environment through authentic work experiences was clearly regarded by lecturers as the most important reason for including WIL in qualifications. They have added the requirement that work experiences need to be authentic with the implication that students need to be active participants in the daily work activities of employers to be adequately prepared for the work environment upon graduation.
- Students have learned predominantly two (2) things from the inclusion of WIL in qualifications, namely the application of theory in the work environment and workplace realities.
- In addition to lecturers' preferences for learning what the "real world" and the integration of theory and practice are about, a more personal aspect in the form of the development of more mature students came to the fore. A link with the measure of work self-efficacy was established, with the implication that more detail can be added to the specific ingredient of WIL that enhances the employability of students.
- An enhanced understanding of theory based on exposure to the practical application thereof in the workplace, the implications of the application of theory that is understood and abstract terminology that is better understood were the main outcomes provided for the effect of WIL on understanding of course content. These results were refined to three (3) domains of learning, namely practical application, implications of theory application and abstract conceptualisation, which can be added as a refinement to the academic benefits of WIL as it relates to deeper learning, enriching students' understanding of the subject matter as well as moving students into a new realm of learning.
- The differences that could be noticed in students upon the completion of WIL are that students have become more mature and responsible as well as more motivated.

- To have a positive attitude and make the most of the opportunity were the advice lecturers would give to students regarding WIL.

### **Section B – Skills and qualities of students and qualification structure**

- The top five (5) skills and qualities listed were communication, subject matter expertise, professional behaviour, problem solving and people skills. Communication and subject matter expertise are the primary skills and quality that students should possess. Most of these skills and qualities require improvement based on the lecturers' assessment thereof.
- Lecturers regard the skills and qualities identified to be a curriculum matter, which corresponds with the view of employers expressed in this regard. Lecturers were more in favour of combining methods to include the skills and qualities identified in the curriculum of which a simulation and case study are the most important. A simulation is regarded to be an important method by lecturers due to the presence thereof in all the combinations suggested.
- To get the most out of WIL, the qualifications should be structured in such a manner that students are placed for WIL for six (6) months during the second semester of the second and third year of study.

### **Section C – WIL quality cycle**

#### **(a) Preparation of students**

- The most important topics to include in the preparation of students for WIL are responsibility, professional behaviour, communication, expectations from the workplace and work ethics. Important to note is that these topics are almost the same as the topics selected by employers, with the only omission being attitude.

#### **(b) Preparation of employers**

- The two dominant issues to emerge from the lecturers' responses are the clarification of expectations and the provision of clear outcomes to be achieved.

This compares well with the more detailed expectations of employers who indicated the clarification of expectations of all three parties concerned as well as the need for clear written outcomes to be achieved.

(c) Placement process

- Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer is the method preferred by lecturers. When CVs need to be used for placement lecturers indicated a CV, cover letter and interview together with a recommendation from CUT as their preferred method to introduce students for placement to employers. Lecturers are in favour of the use of one representative from CUT to deal with placement and are generally not in favour of students approaching employers regarding placement – the exact sentiments expressed by employers.

(d) Monitoring by the university

- A personal visit by a representative from CUT is the most important monitoring method, which corresponds with the view expressed by employers. Lecturers prefer to do personal visits on either a monthly or semester basis, which is seemingly well aligned with the need of employers who require personal contact on at least a quarterly or semester basis.

(e) Mentoring and supervision by employers

- Combining mentorship and supervision was the preferred method, which can be best enhanced by providing guidelines and templates to employers.

(f) Assessment by the university and employers

- A practical demonstration is regarded to be the single most important assessment method. A conclusion drawn from the frequency of assessment required is that students should first do a practical demonstration, then talk about

what they have learned, followed by writing down and reflecting on what they have learned before they are assessed in the workplace by CUT.

(g) Debriefing

- The results obtained confirmed the centrality of students in the debriefing process. As was the case with employers, a student debrief with CUT is regarded as the most essential and a student debrief with an employer is regarded to be the most important. Debriefing is mostly required on a semester basis with the only exception that a student debrief with an employer needs to occur on a monthly basis.

### **Section D – General issues related to WIL**

- Lecturers were of the opinion that employers' involvement in WIL is primarily based on using WIL as a recruitment method. The other main reasons indicated were the provision of future staff for their relevant industry, creating a pool of applicants to use in future and social responsibility.
- Lecturers also thought that employers would prefer to appoint WIL students rather than non-WIL students based on practical work experience as the primary reason for preferring WIL students. The other reasons provided were generally in alignment with the reasons provided by employers.
- The three most important reasons provided with regard to what specifically about WIL enhances the employability of students are being better prepared and equipped for the working world, the practical application of knowledge and time to assess a future employee and reducing risks with new appointments. These reasons also correspond well with the reasons provided by employers.

### **Section E – SWOT analysis**

Strengths:

- The employability of the students.



- Exposure of students to the workplace.
- Lecturers from programmes who are actively involved in WIL.
- Relationship between employers and CUT.

Weaknesses:

- Elaborate administrative processes.
- Not enough employers for WIL.
- Preparedness of students for WIL.
- The deteriorating standard of students.

Opportunities:

- Build strong personal as well as strategic relationships with commerce, industry and the public sector.
- To enhance the image and reputation of students and CUT.
- Better prepared and equipped students for the working world.

Threats:

- Losing personal contact with employers.
- Competition from other universities.
- The limited number of WIL opportunities in Bloemfontein and Welkom.

In addition to the views of lecturers and employers, the opinions of students also need to be considered to complete the analysis of the three questionnaires. Once this has been done in the next chapter, the empirical analyses will be completed by an analysis of each of the stakeholders' opinions and ratings from a faculty and programme perspective within the context of the pertinent issues and trends identified on the institutional level.

## **CHAPTER 8**

# **A QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE FINDINGS: STUDENTS**

### **8.1 INTRODUCTION**

As in the case of employers and lecturers, the questionnaires were distributed via e-mail to the identified participants. Purposive sampling was used to select the students, since they needed to be in a department with programmes that contained a compulsory WIL component and had WIL experience of at least three months.

As explained in the research methodology chapter, a qualitative approach was primarily followed to elicit the views of students (and lecturers) and some of the sections of the questionnaires are the same, given the overlap in issues applicable to all three stakeholders. Students therefore completed the same questionnaire as lecturers did in order to determine similarities and differences in opinions and ratings. The rationale for all the questions and the methods of analyses applied are thus not repeated.

The target population was all students who have completed WIL in those programmes offered at CUT that contain a compulsory WIL component. The sample size for students was determined as one (1) student who completed WIL per department with programmes that contained a compulsory WIL component. Responses were received for twelve (12) qualifications and departments, which are equal to a response rate of 80%. As stated previously, due to the qualitative nature of the investigation, the number of programmes for students (and lecturers) was less than the number of programmes that employers had responded to.

The results of the students' questionnaire (Annexure 3) are presented and analysed below in accordance with the broad classification of sections in the questionnaire, with a summary of the most pertinent issues and trends identified provided at the end of the analysis.

**Section A – WIL Rationale**

**Section B – Skills and qualities of students and qualification structure**

**Section C – WIL quality cycle**

**Section D – General issues related to WIL**

**Section E – SWOT analysis**

## **8.2 ANALYSIS OF STUDENTS' QUESTIONNAIRE RESULTS**

### **Section A – WIL rationale**

The information in this section is applicable to the following aspects, which are graphically presented below:

- Relevant qualifications and WIL experience
- Qualitative analysis of WIL rationale

The distribution and relevance of responses received from students with regard to faculties and qualifications are indicated in Figure 8.1 and Figure 8.2 below.

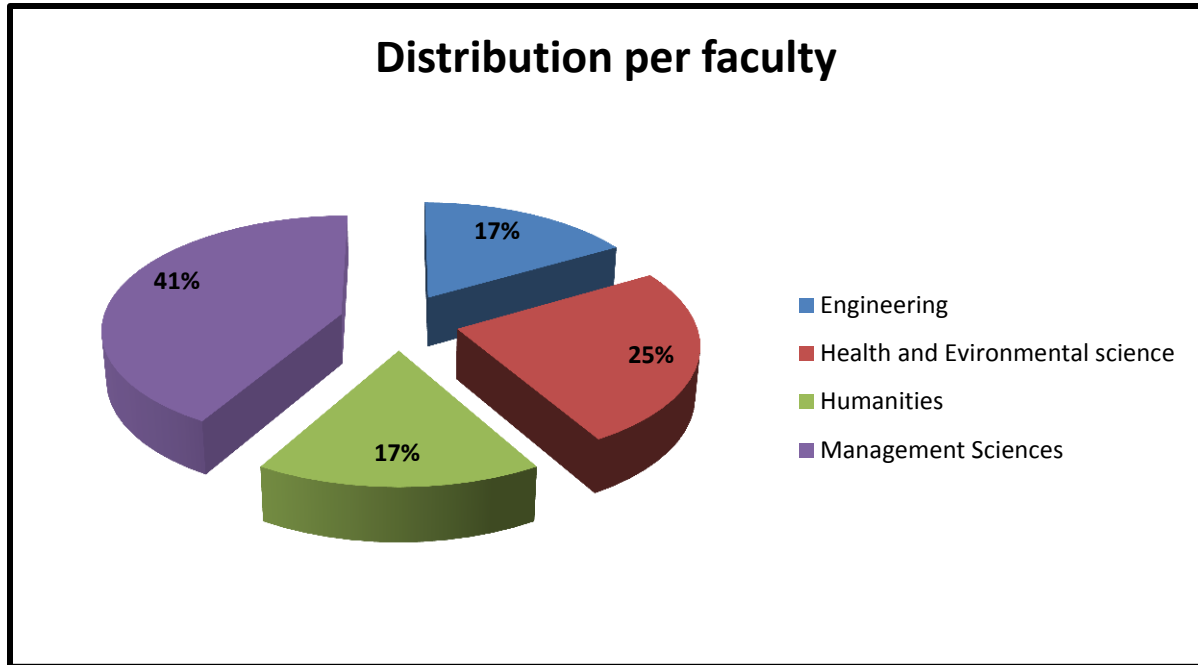


Figure 8.1: Distribution of responses per faculty

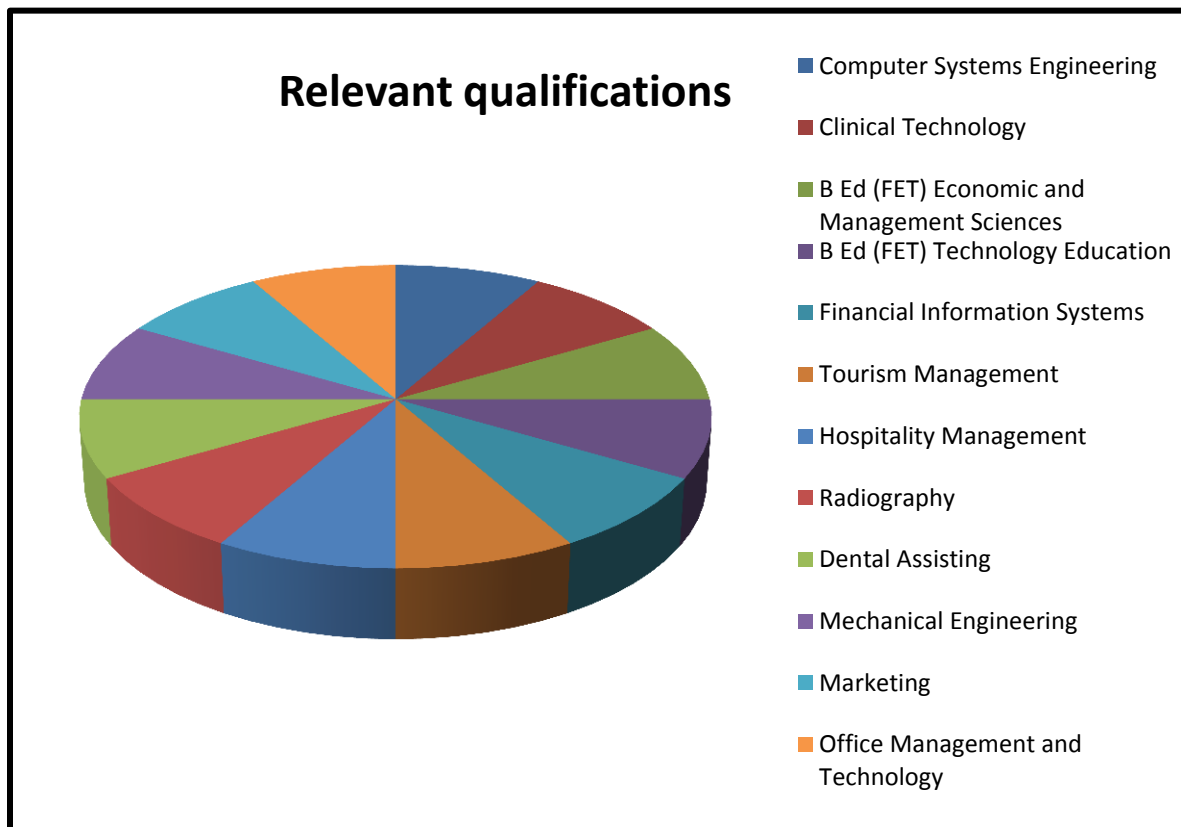
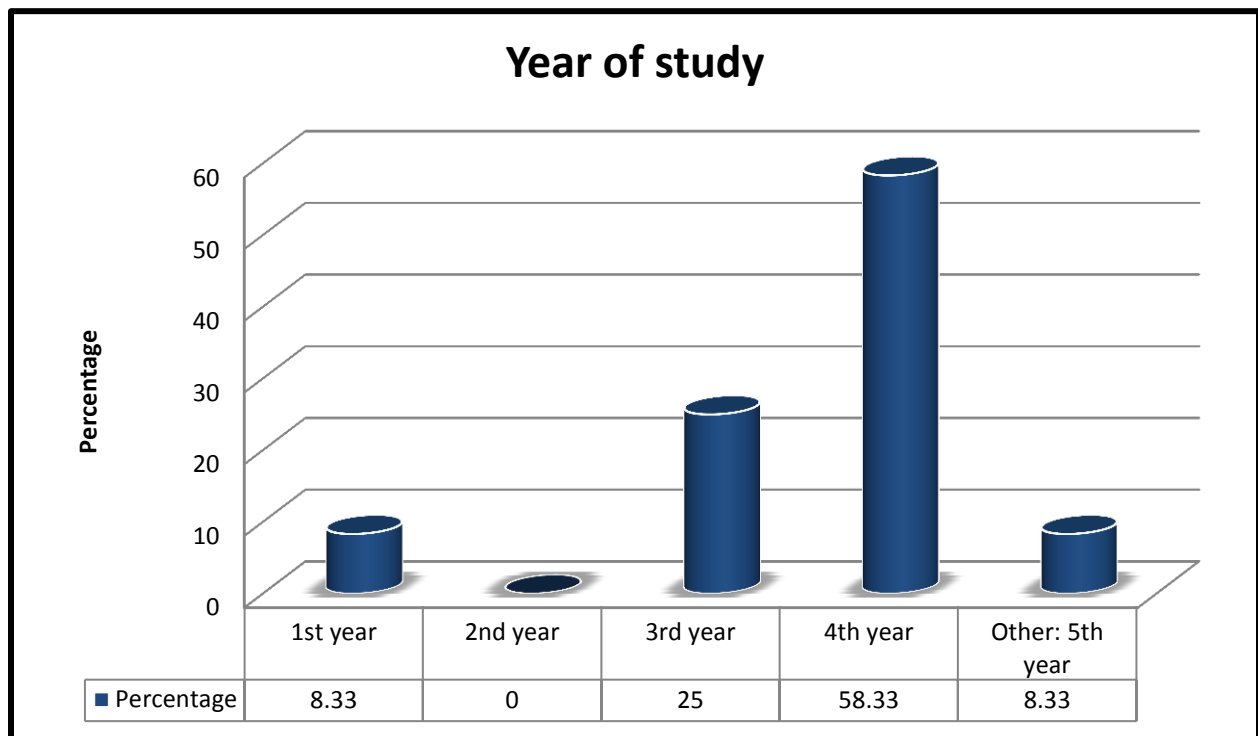


Figure 8.2: Responses per relevant qualification

Although an even distribution was not achieved between faculties, it has to be borne in mind that the number of qualifications is also not evenly distributed between faculties as indicated in Table 6.1 of chapter 6. An overall response rate of 80% was achieved with responses received for relevant qualifications distributed across all four (4) faculties.

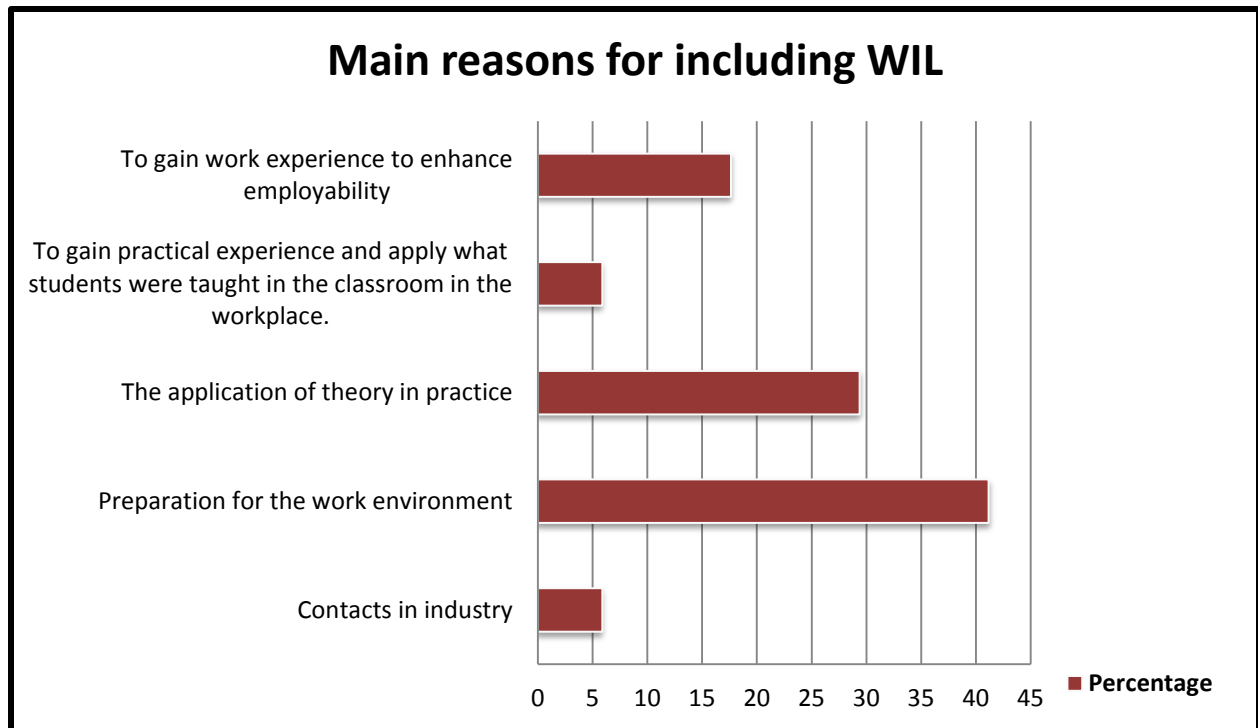
The students had an average of 8,4 months of WIL experience, with the relevant year of study shown in Figure 8.3.



*Figure 8.3: Relevant year of study of student respondents*

Even though the students' experience of 8,4 months is not comparable with the experience of employers and lecturers, it is noticeable that mostly senior students responded. It also has to be noted in addition that the duration of the WIL component in the qualifications surveyed varies between three (3) to twelve (12) months, which does provide more credibility to the students' opinions and ratings, which will be analysed next.

Students' views and opinions regarding the six (6) open-ended questions are presented and analysed in Figures 8.4–8.9.

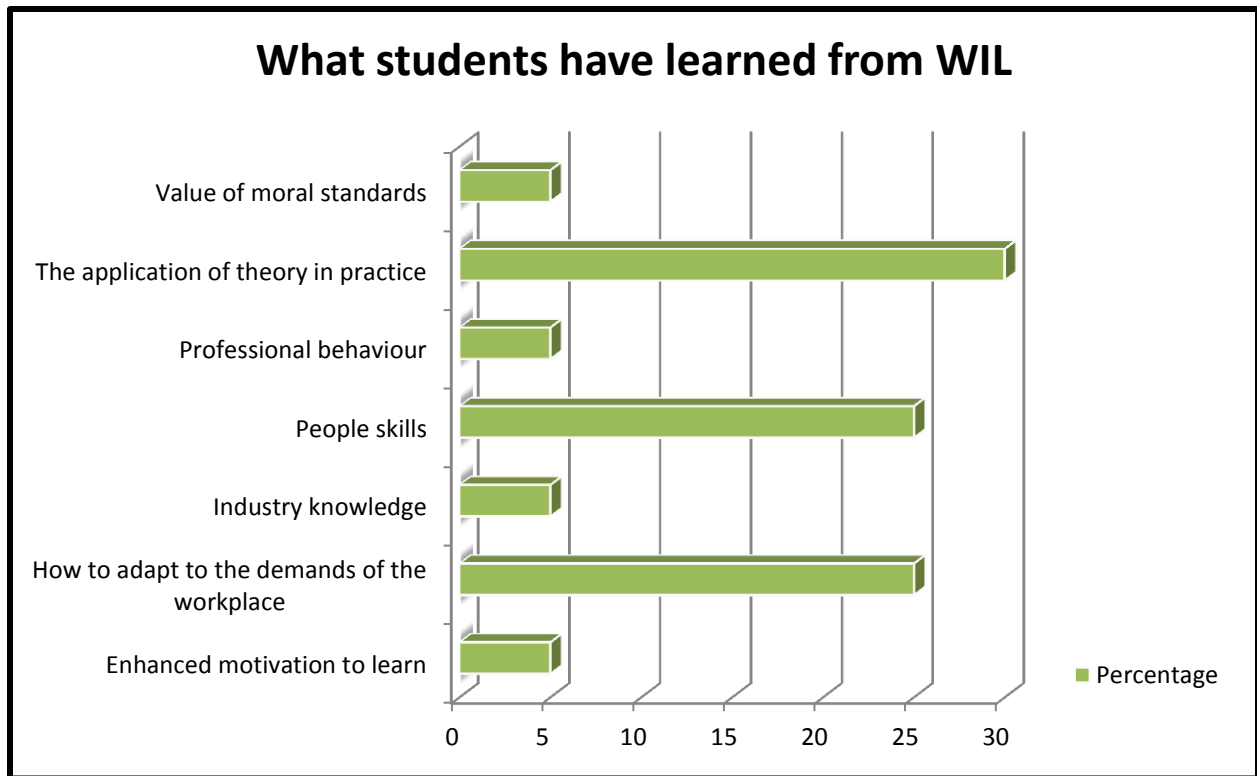


*Figure 8.4: Main reasons for the inclusion of WIL in qualifications*

As can be seen in Figure 8.4, the two (2) main reasons are preparation for the work environment and the application of theory in practice, which corresponds with the views of lecturers. It is interesting to note that all the themes contain an element of the workplace, which suggests that students are aware of the importance of employers as a stakeholder in WIL. The following are examples of reasons provided by students, which are quoted verbatim:

- “To gain knowledge and experience about the work we learn in class and to understand the theory more practically.”
- “Gives students an opportunity to work in the industry with real life situations and problems, so that when they graduate they have at least worked 1 year in the industry and are more skilled.”
- “To help us understand and get a feel for the workplace. To gain the necessary experience to go into a job one day as prepared as possible.”

Students’ opinions on what they have learned from the WIL are shown in Figure 8.5.



*Figure 8.5: Students' opinions of what they have learned from WIL*

As indicated in Figure 8.5, students have predominantly learned about the application of theory in practice, how to adapt to the demands of the workplace and people skills. The only difference in opinion between students and lecturers are that students have added aspects of a more personal nature such as people skills, the value of moral standards and an enhanced motivation to learn which points to a more holistic development picture at this stage in comparison with the assessment of lecturers.

Some of the explanations provided are the following:

- “I have learned how to behave in the workplace, how to handle pressure and study at the same time.”
- “Many skills regarding how to work with guests, reservations and other staff. Working in a hotel is very different to practical classes so I learnt a lot about the hotel industry and how a hotel works.”

- “I learnt a lot about myself, how I would react in certain situations, under stress and my management style. You gain a different kind of knowledge; it is all practical scenarios that help you understand the theory learnt at CUT.”

The value that students attach to WIL is portrayed in Figure 8.6.

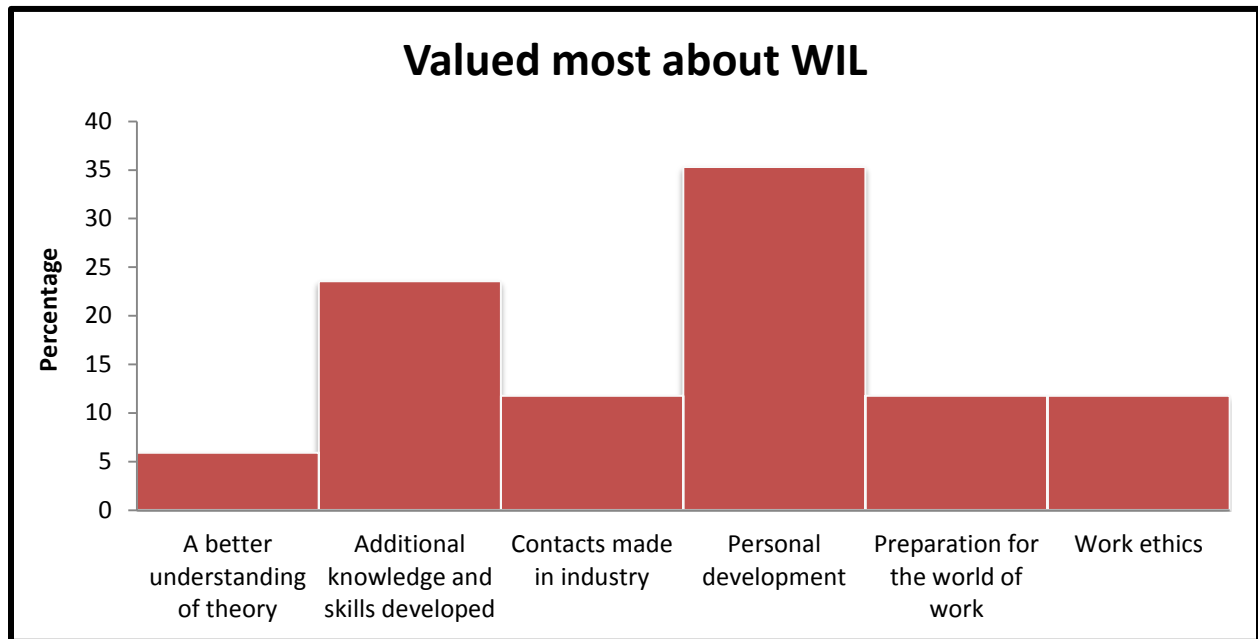
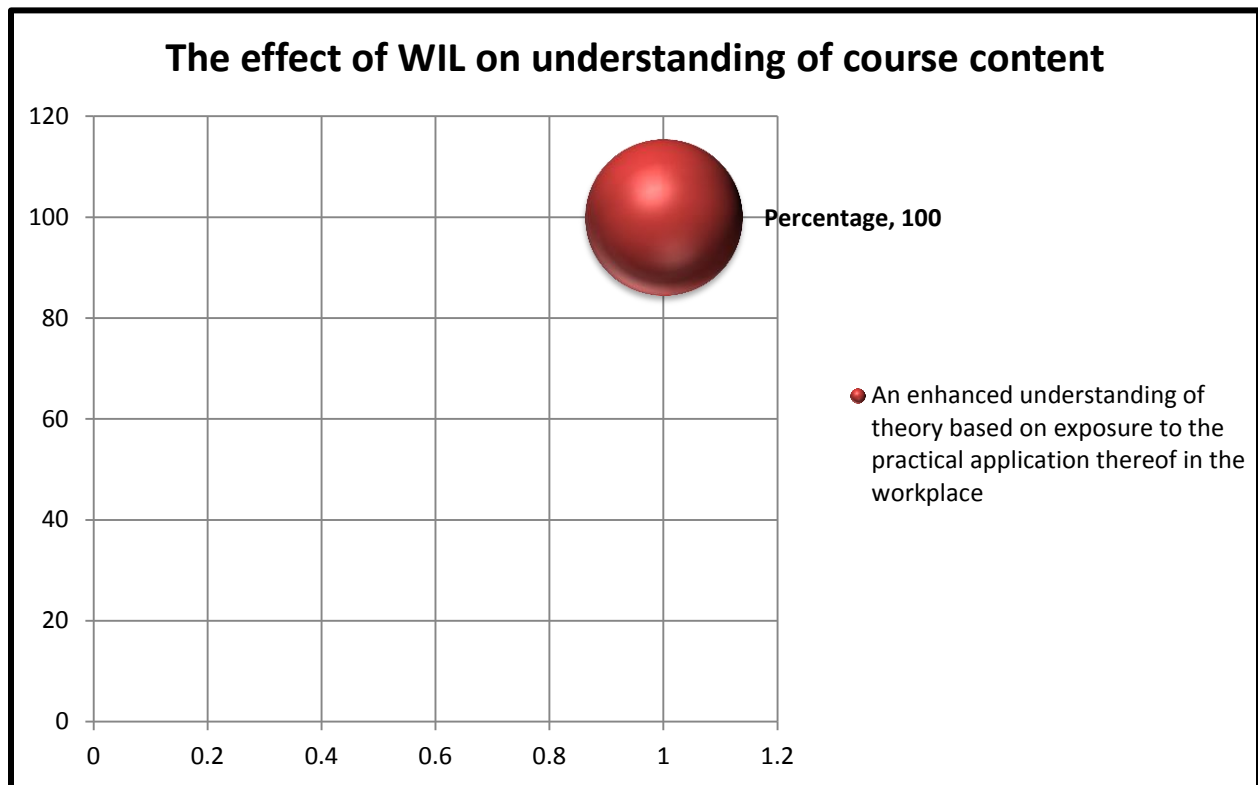


Figure 8.6: Summary of what students value the most about WIL

The results in Figure 8.6 can be regarded as a continuation of what students have learned additionally from WIL, since what they value most is primarily about personal development and additional knowledge and skills developed. The greater emphasis on personal development could be because the students are the nexus of integrating classroom and workplace learning, as pointed out by Trede (2012:160) in chapter 4 dealing with a review of the application of WIL in higher education from an international perspective. It also corresponds with the link established at this point with lecturers' opinions regarding the development of work self-efficacy as explained by Raelin *et al.* (2011:31). Additional support is thus provided for more detail that can be added to the specific ingredient of WIL that enhances the employability of students.



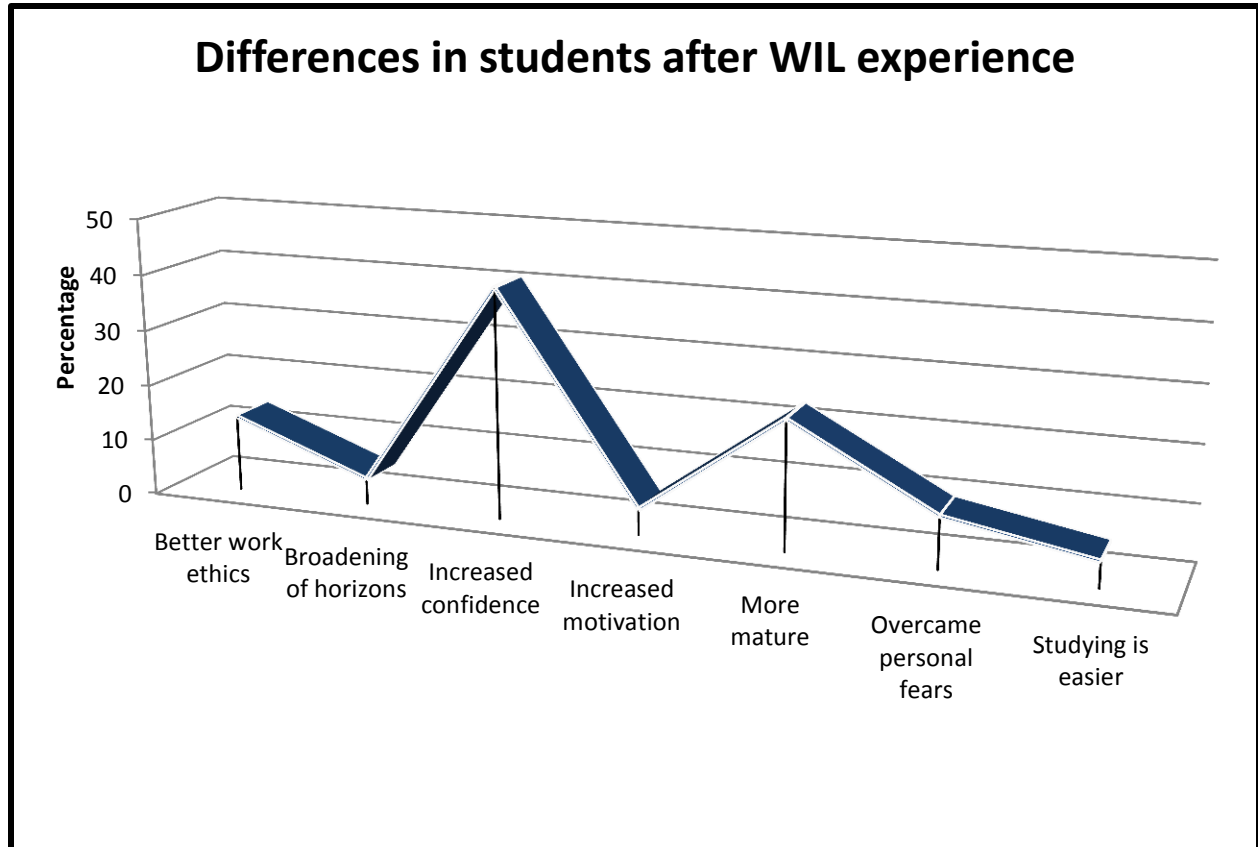
The effect of WIL (and the more holistic and personal development described) on students' understanding of the course content is indicated in Figure 8.7 below.



*Figure 8.7: The effect of WIL on students' understanding of course content*

Whereas the assessment of lecturers indicated an enhanced understanding in three (3) different domains, the students were all of the opinion that WIL lead to an enhanced understanding of theory, based on exposure to the practical application thereof in the workplace. This provides further proof for the value and impact of WIL as pedagogy as well as the academic benefits of WIL reported in Chapter 2.

How different they are because of their WIL experience is indicated in Figure 8.8.

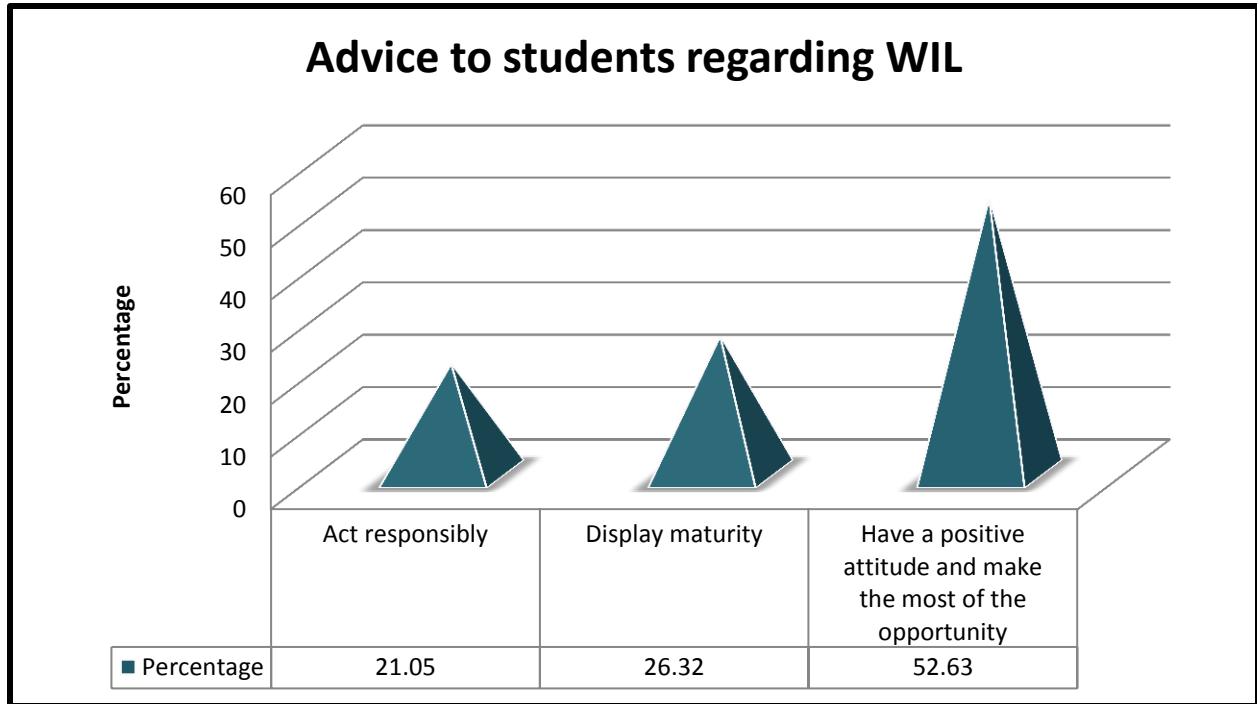


*Figure 8.8: Noticeable differences in students upon completion of WIL*

Students returned from their WIL experience with increased confidence and more mature as being the main differences, in their own opinion. The following examples of explanations received from students provide further clarification in this regard:

- “I am more confident in my abilities than when I first started.”
- “I talk to people easier. I am not as scared of ‘life’ and taking chances as before.”
- “My horizons have broadened because I want to do and achieve so much more now and I have learned how to handle people better.”

The advice they would give to other students regarding WIL is summarised in Figure 8.9.



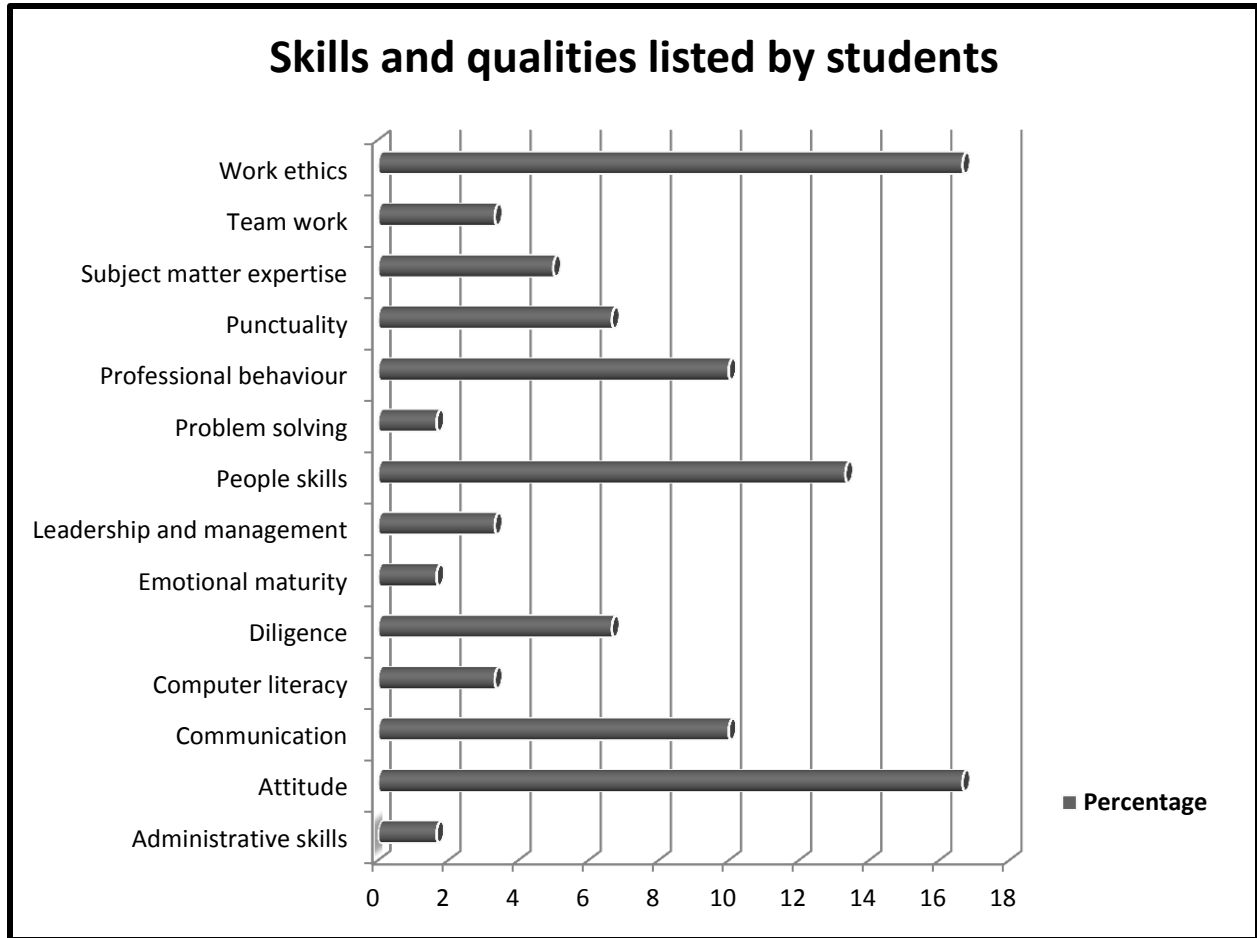
*Figure 8.9: Students' advice to other students regarding WIL*

It is very interesting to note that students have singled out the importance of a positive attitude, together with displaying maturity and acting responsibly, given the importance employers have also attached to the conduct of students. Whether the same importance will be given to conduct by students in respect of the skills and qualities required will be determined in the analysis of the quantitative sections of the questionnaire below.

## **Section B – Skills and qualities of students and qualification structure**

The rationale for this section has already been explained when the analyses of lecturers and employers were discussed above and are thus not repeated. This analysis is therefore more focused on the results obtained.

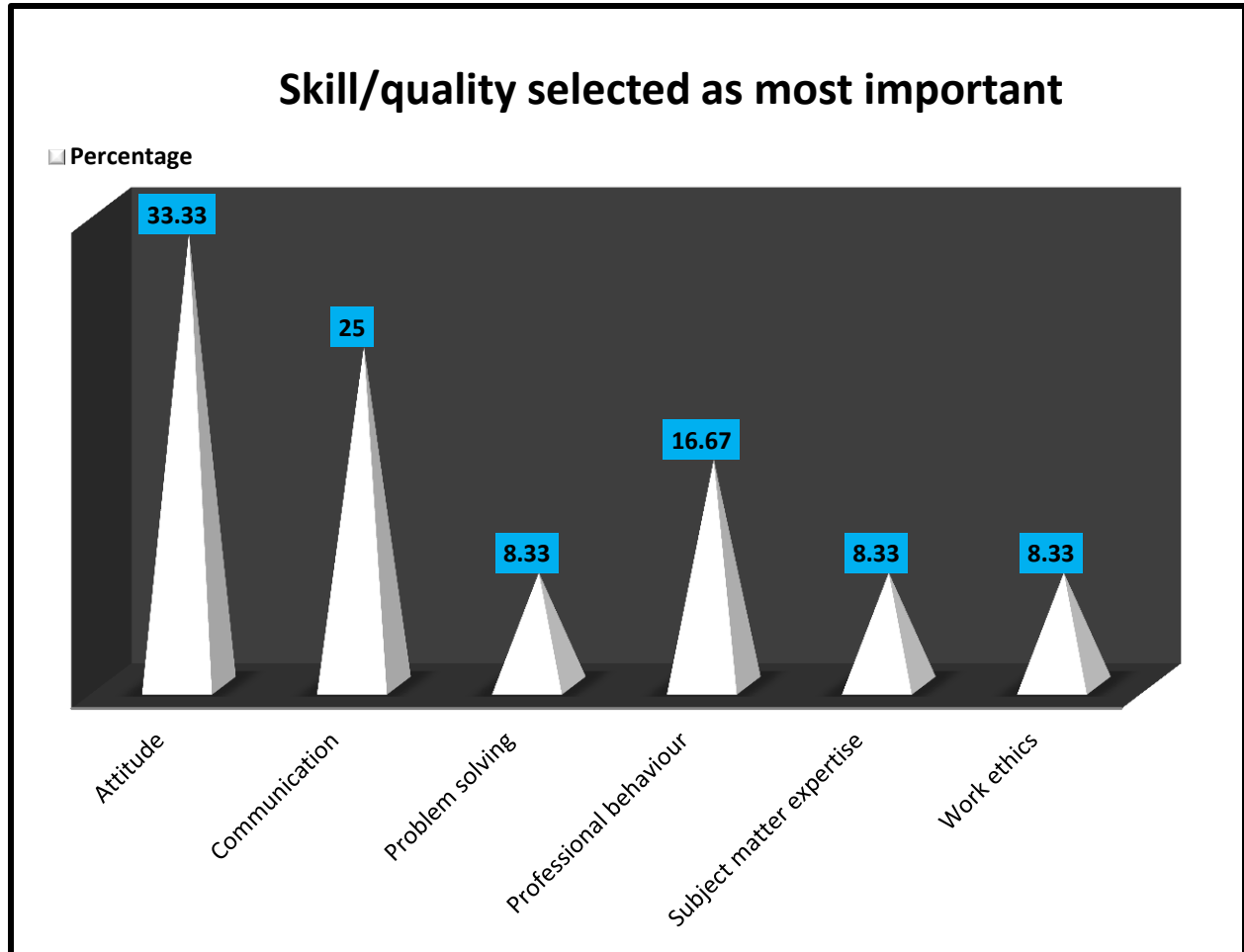
The top five (5) skills and qualities listed by students are shown in Figure 8.10.



*Figure 8.10: Skills and qualities listed by students to be appointed as an employee*

The top five (5) skills and qualities required in the students' opinion in ranking order are attitude, work ethics, people skills, communication and professional behaviour. This is almost an exact match with what is required by employers, with subject matter expertise as the notable omission.

The skill or quality singled out to be the most important is indicated in Figure 8.11 below.



*Figure 8.11: Skill or quality selected by students as the most important*

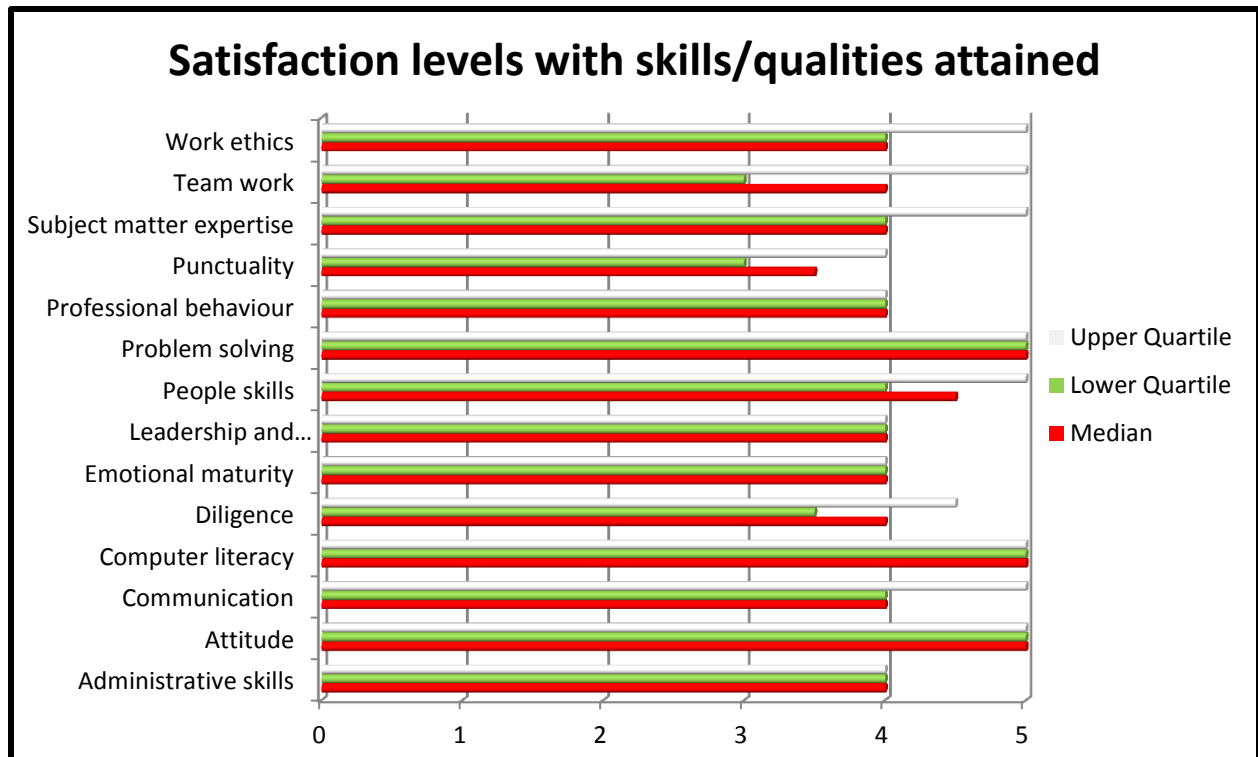
In terms of the results presented in Figure 8.11 there were six (6) skills and qualities regarded by students as the most important. Problem solving and subject matter expertise were included at the expense of people skills. A comparison of the top skills and qualities from both graphs is done in Table 8.1 to identify the ideal bucket of skills and qualities in the students' opinion:

*Table 8.1: Comparison of skills and qualities*

List of top skills and qualities with a rating of at least 5% (Figure 8.10)		List of the single most important skills and qualities (Figure 8.11)	
Attitude	16.67	Attitude	33.33
Work ethics	16.67	Communication	25
People skills	13.33	Professional behaviour	16.67
Communication	10	Problem solving	8.33
Professional behaviour	10	Subject matter expertise	8.33
Diligence	6.67	Work ethics	8.33
Punctuality	6.67		
Subject matter expertise	5		

The application of the five percent (5%) principle, where skills and qualities with a rating of at least a 5% in both columns are selected, reveals that students' ideal bucket of skills and qualities are attitude, communication, professional behaviour, subject matter expertise and work ethics.

How close CUT students are in possessing the ideal bucket of skills and qualities in terms of their own assessment is presented in Figure 8.12.



*Figure 8.12: Students' own ratings of skills and qualities attained by them*

The median scores in Figure 8.12 indicate the following ratings with regard to the ideal bucket of skills and qualities of students: attitude: 5; communication: 4; professional behaviour: 4; subject matter expertise: 4 and work ethics: 4. Students have rated themselves much higher in level of attainment than both employers and lecturers have done. This could possibly be due to the increased confidence experienced by students upon their return to campus from their WIL experiences, but nonetheless indicates a mismatch in perception students will have to address.

Final comparisons and ratings together with the implications thereof will be made in the final chapter wherein conclusions are drawn based on the statistics and literature reviews and the strategy is presented inclusive of all the summative analyses and comparisons.

The students' opinion regarding whether these skills and qualities should be regarded as a curriculum matter is determined from the results in Figure 8.13.

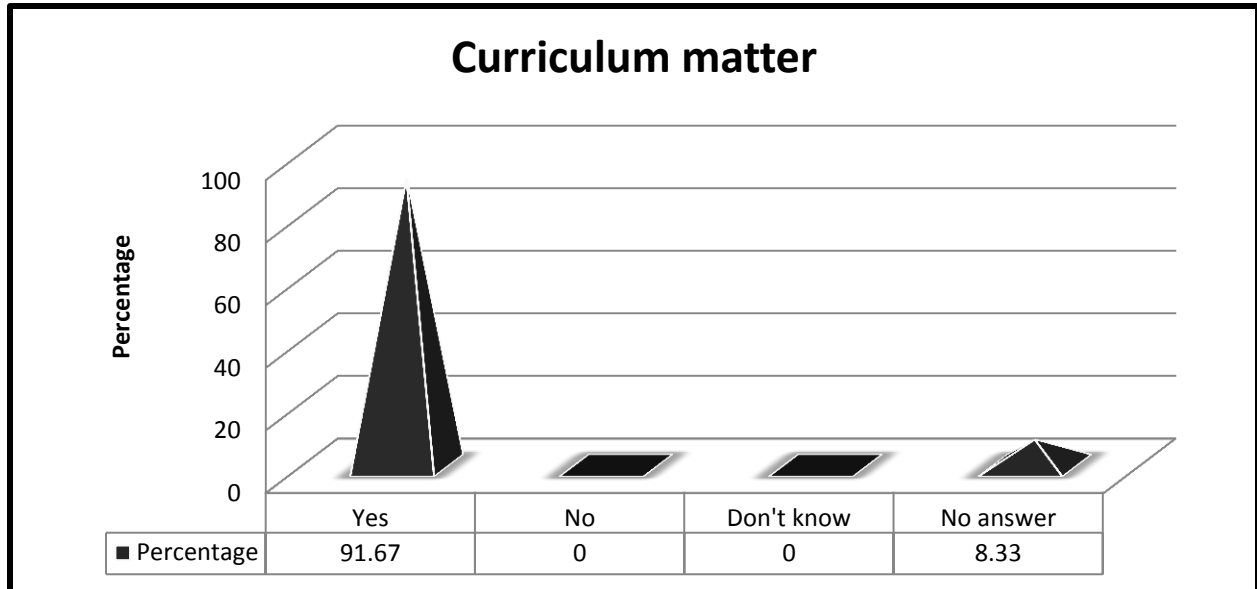


Figure 8.13: Inclusion of skills and qualities identified in the curriculum

All the students who have answered this question are clearly of the opinion that the skills and qualities identified must be included in the curriculum, which corresponds with the view of employers and lecturers expressed in this regard. How these skills and qualities should be included in the curriculum is shown in Figure 8.14.

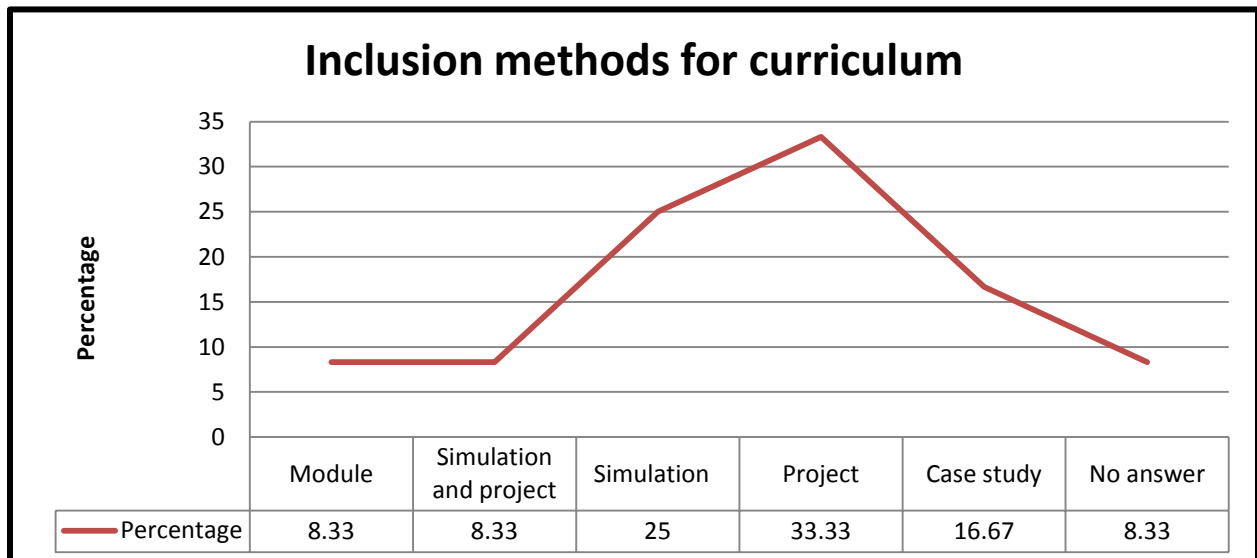
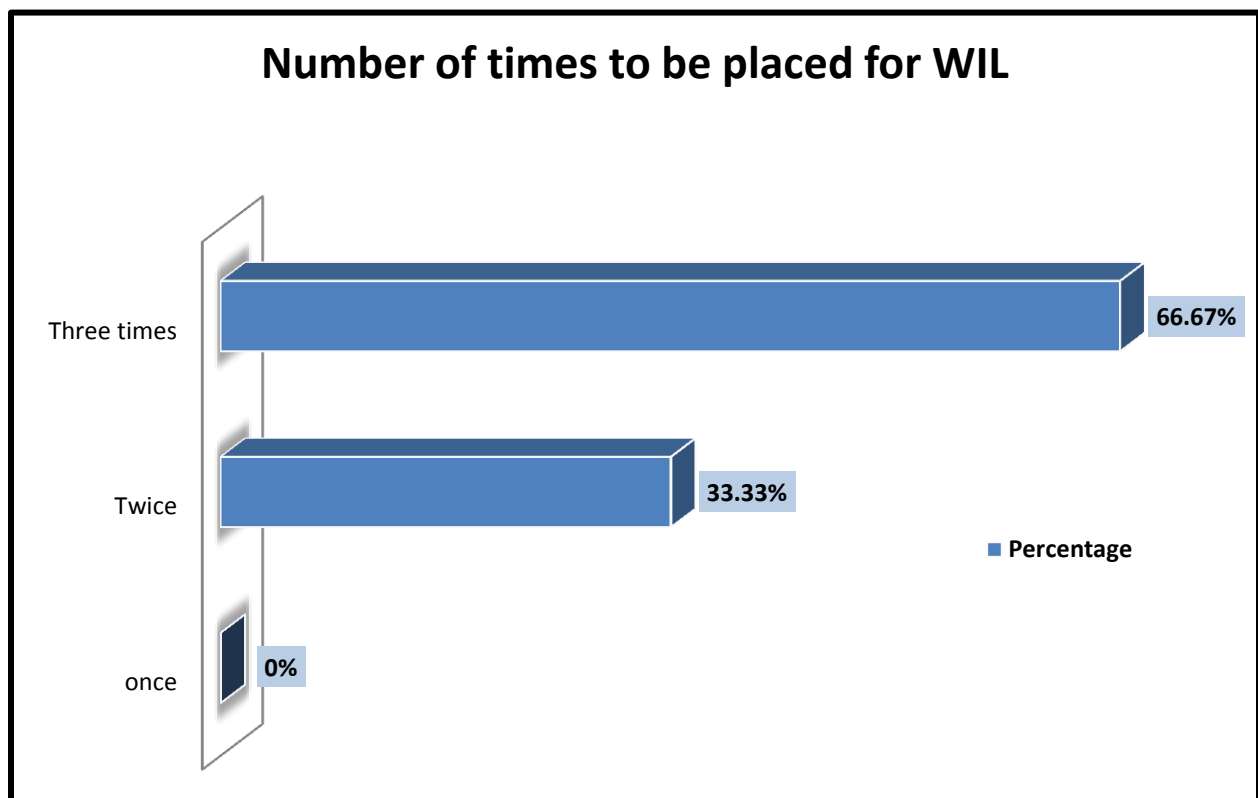


Figure 8.14: Methods for including skills and qualities in the curriculum



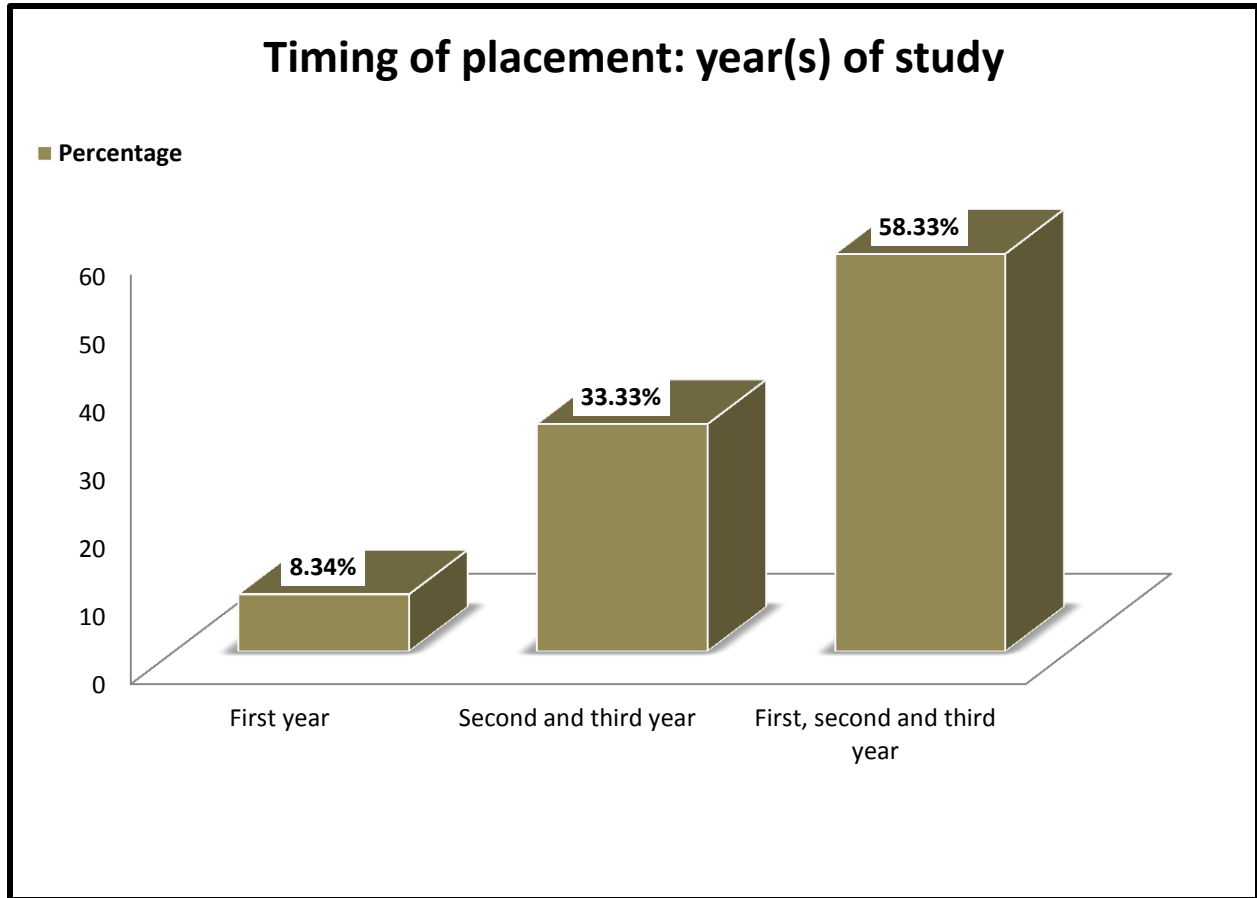
Students also seem to favour singular methods as employers have done with a project indicated as the most important method to students. No significant other methods were suggested.

The ideal structure of the WIL component from the students' point of view can be derived from their suggestions, as indicated in Figures 8.15–8.18. Students should be placed at least twice, but preferably three (3) times while studying for a qualification as indicated below in Figure 8.15. This is the same opinion expressed by employers, but it differs from what lecturers have proposed as explained in chapter 7.



*Figure 8.15: The number of times students should be placed during the attainment of a qualification*

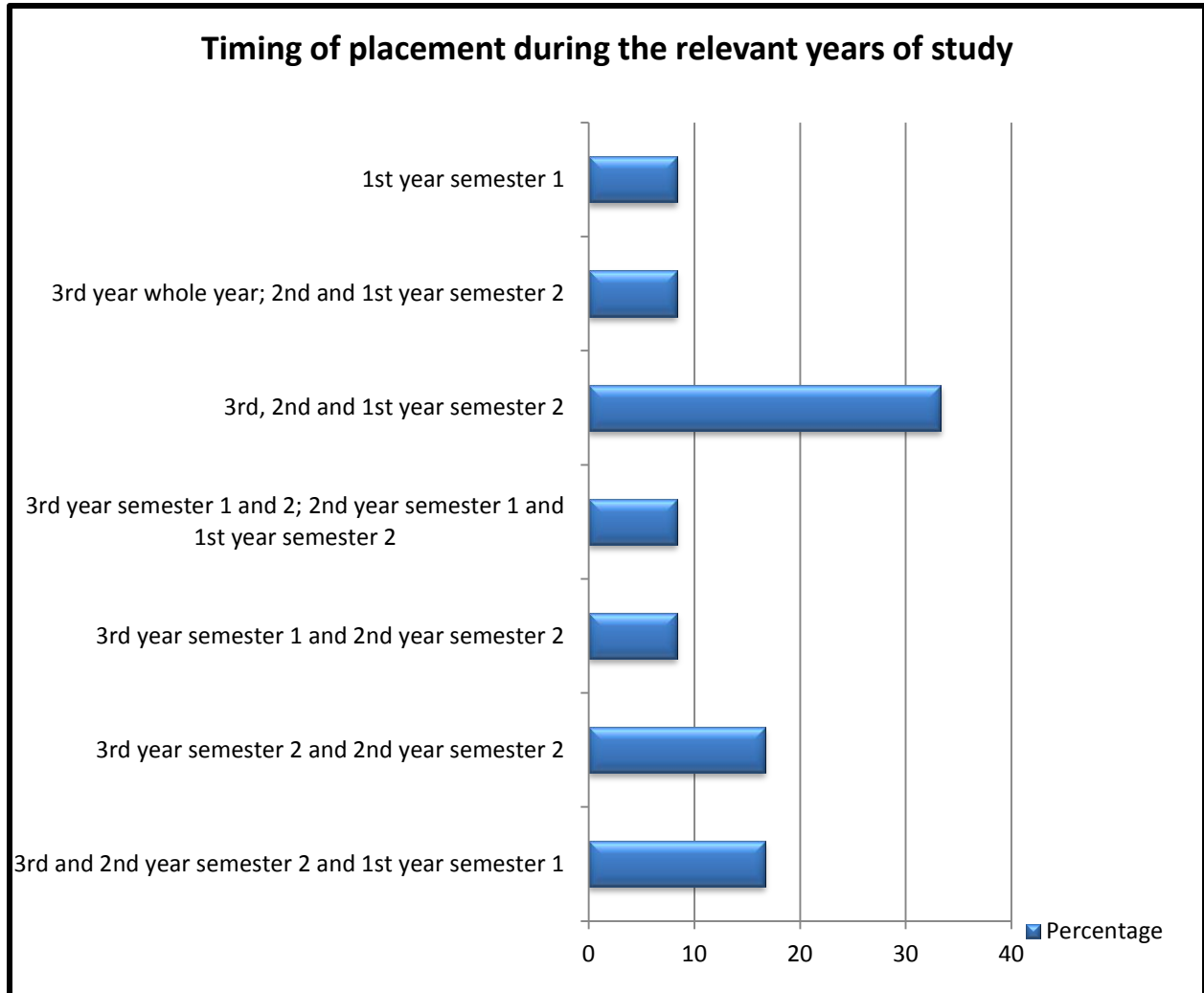
The students' views with regard to which year or years of study they should be placed for WIL are shown in Figure 8.16.



*Figure 8.16: Placements during relevant year(s) of study*

As was noticed with employers and lecturers, the third year of study is the preferred time of placement, although placement during the second and first year of study was also supported. The placement of students during all three (3) years of study is also aligned with students' (and employers) preferences that students should be placed at least twice, but preferably three (3) times. As a result, it can be concluded that students prefer to be placed three (3) times during each year of study.

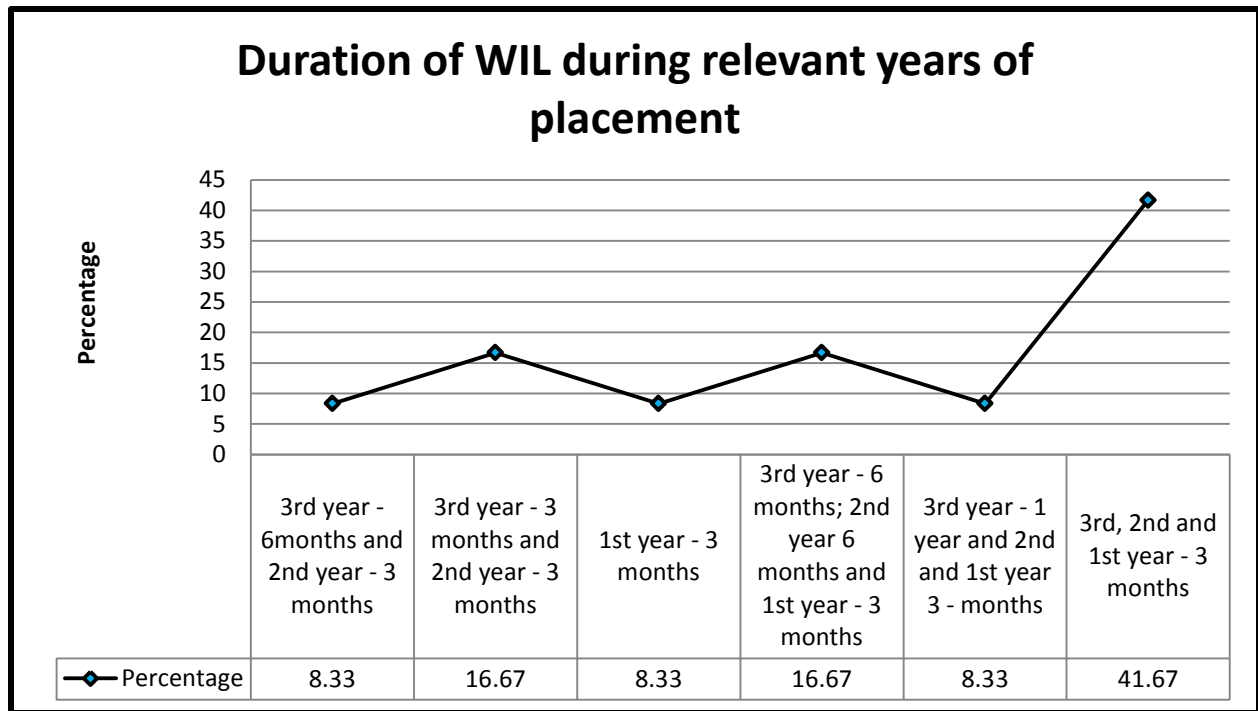
When students should be placed during the relevant years of study, is indicated by their choices in Figure 8.17.



*Figure 8.17: Timing of placements during the relevant years of study selected*

The combination clearly favoured by students is to be placed during the second semester of the first, second and third year of study, which also represents the ideal combination for students at this stage.

To complete the picture for students, their choices regarding what the duration of WIL should be is shown in Figure 8.18.



*Figure 8.18: Duration of placement during the relevant years of placement*

In keeping with their choices regarding the number of times to be placed, and when they should be placed, students are of the opinion that they should be placed for three (3) months during all three years of study. The ideal combination derived from the interpretation of the students' choices is that they should be placed for WIL for three (3) months during the second semester of the first, second and third year of study.

Various similarities and differences have thus far been determined. What the situation will be with regard to the WIL quality will be revealed in the section below.

### **Section C – WIL quality cycle**

As was indicated in terms of this section of the lecturers' analysis, a detailed explanation with regard to the rationale for the inclusion and the methods used to analyse the results of this section of the questionnaire has already been provided and is not repeated in the analysis to follow. The same methods of analysis are used to ensure consistency and objectivity.

- (a) Preparation of students

The results of responses received with regard to the fifteen (15) topics listed are presented in Figure 8.19, while students' selection of the most important topic is portrayed in Figure 8.20.

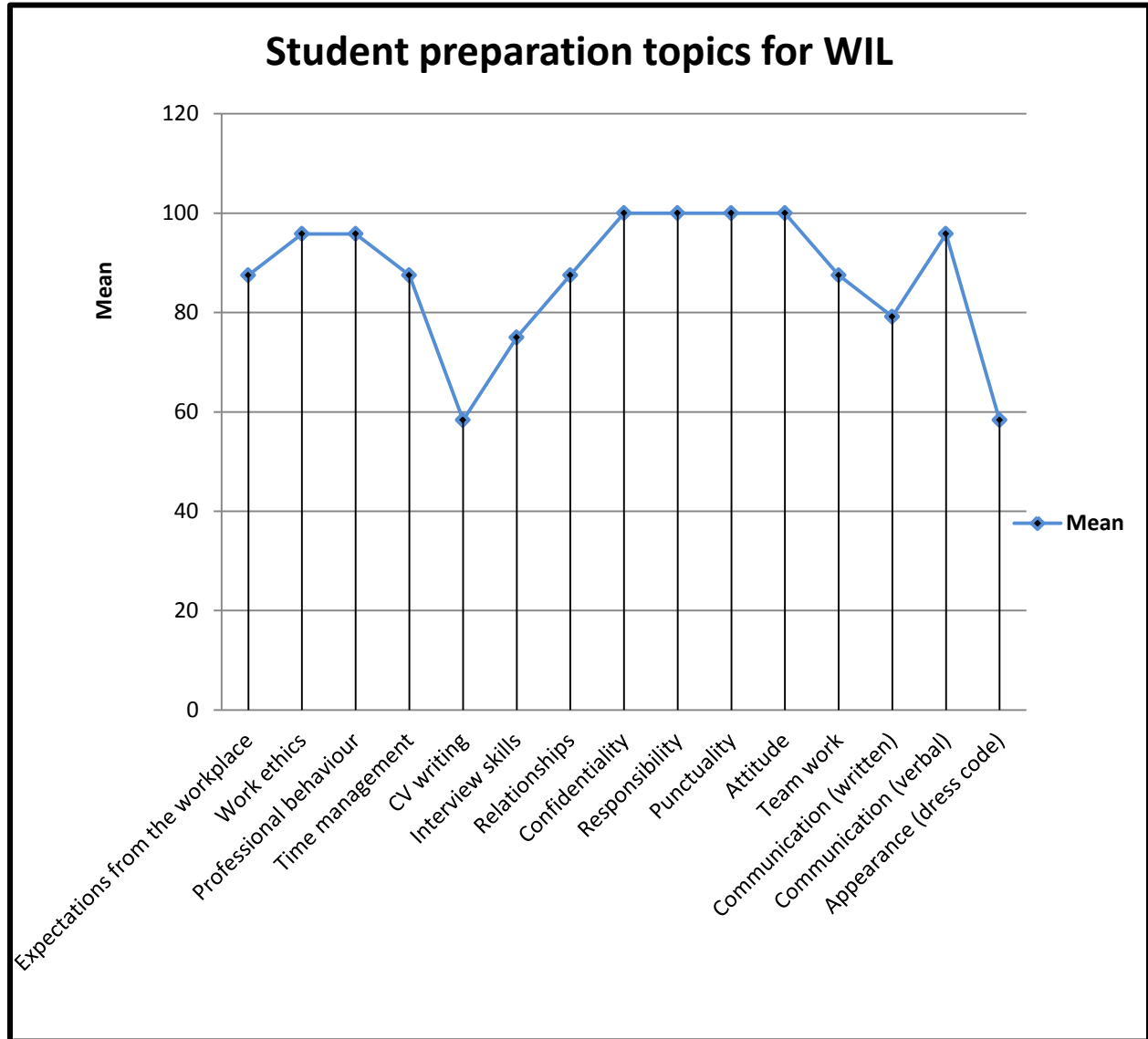


Figure 8.19: Students' rating of student preparation topics for WIL

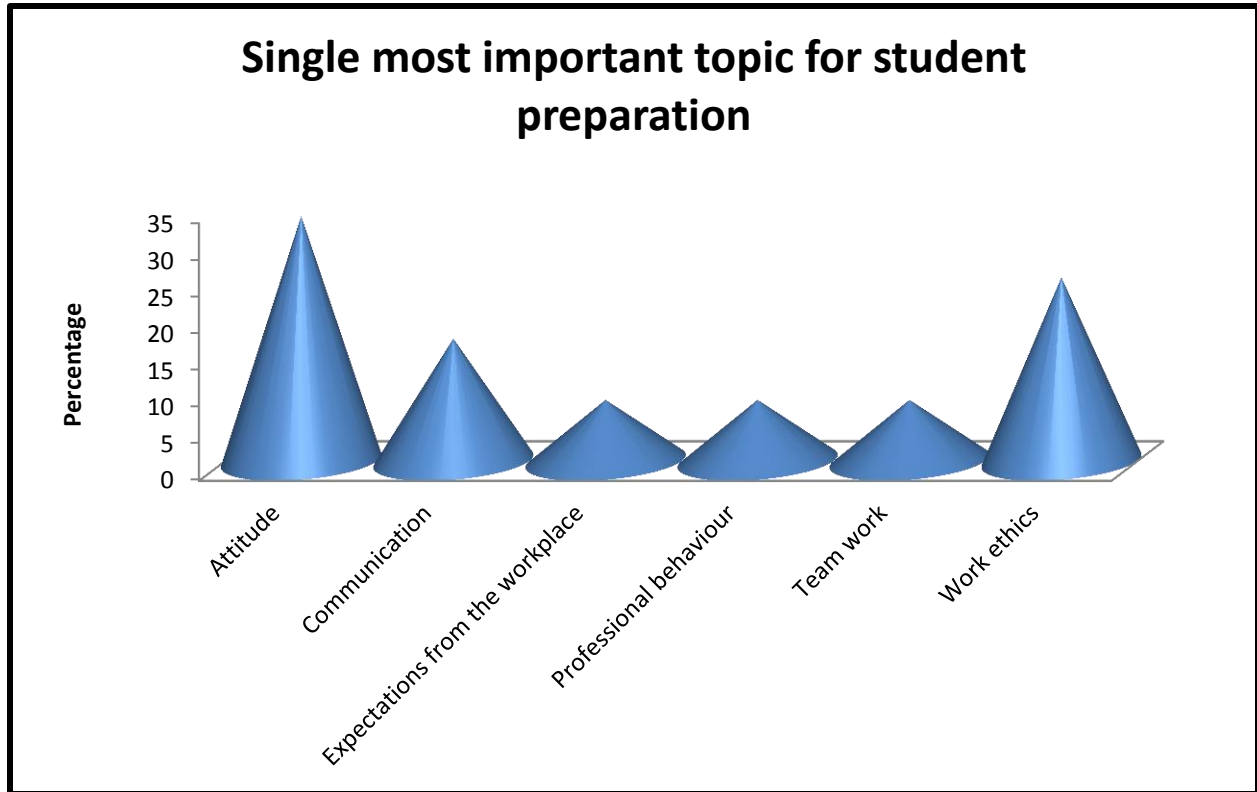


Figure 8.20: Topic selected by students as the most important

A comparison of the topics selected is provided in Table 8.2 to enable the selection of those topics to be included in the preparation of students for WIL.

Table 8.2: Comparison of student preparation topics for WIL

List of topics selected Figure 8.19	Mean	Most important topic selected Figure 8.20	Percentage
Confidentiality	100	Attitude	33.33
Responsibility	100	Work ethics	25
Punctuality	100	Communication	16.67
Attitude	100	Expectations from the workplace	8.33
Work ethics	95.83	Professional behaviour	8.33
Professional behaviour	95.83	Team work	8.33
Communication (verbal)	95.83		

The most important topics to include in the preparation of students for WIL are attitude, work ethics, communication and professional behaviour as the only topics in the second column (percentages) supported by the mean scores in the first column.

(b) Preparation of employers

The students' views regarding the single most important issue that should be addressed in preparing employers for WIL is shown in Figure 8.21.

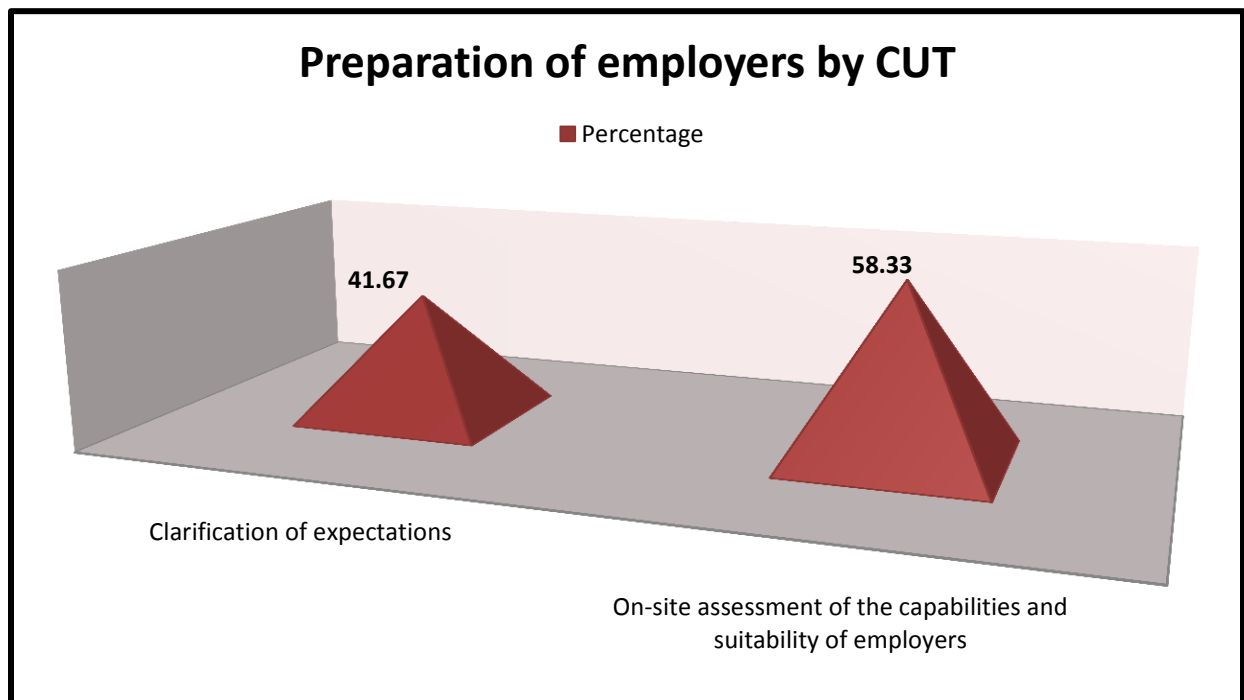


Figure 8.21: Issues to be addressed in preparing employers for WIL

The only two issues to emerge from the students' responses are the clarification of expectations and, more importantly, an on-site assessment of the capabilities and suitability of employers. Although no explanations were provided, it is assumed that students felt that they could have achieved more, had all employers been visited and approved by a representative of CUT.

(c) Placement process

The students' ratings of the placement methods listed are shown in Table 8.3.

*Table 8.3: Placement methods preferred by students*

Placement methods	Mean
CV, cover letter and interview together with a recommendation from CUT	87.5
Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer	83.33
Placements to be handled by one representative from CUT	75
CV, cover letter and interview	45.83
CV, cover letter and recommendation from CUT	37.5
CV and recommendation from CUT	37.5
CV and interview	33.33
Students to approach employers on their own with a follow-up done by CUT	33.33

The pertinent issues to emerge from the responses received are the following:

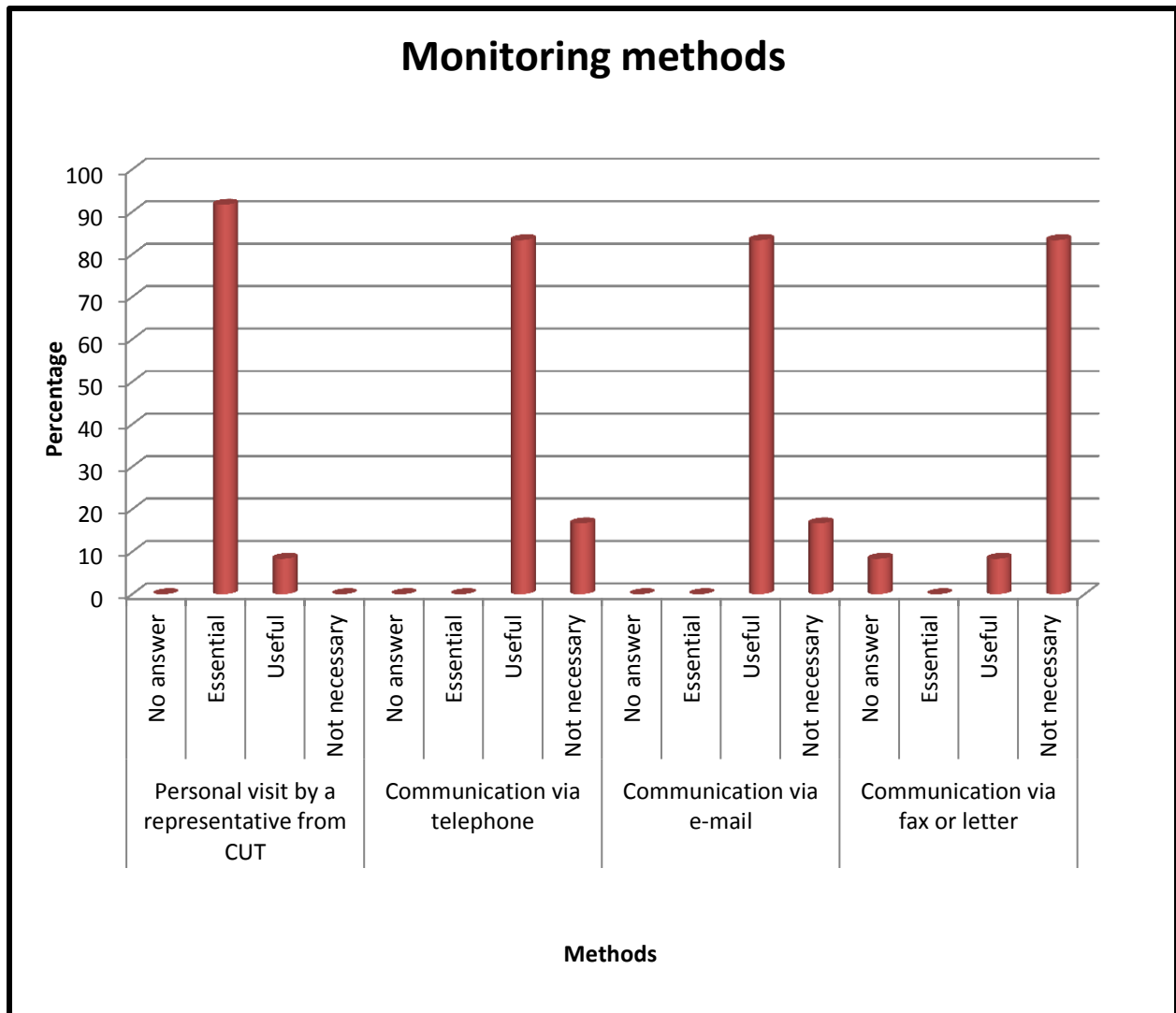
- Students want one representative from CUT to handle placements and are generally not in favour of approaching employers on their own regarding placement.
- A CV, cover letter and interview together with a recommendation from CUT is the preferred method to introduce students for placement to employers.
- In the absence of CVs and interviews, students can also be allocated to employers by CUT based on CUT's knowledge of the students and employer.

Additional suggestions made were that students could do volunteer work or job shadowing at employers during holidays before they are placed.

(d) Monitoring by the university

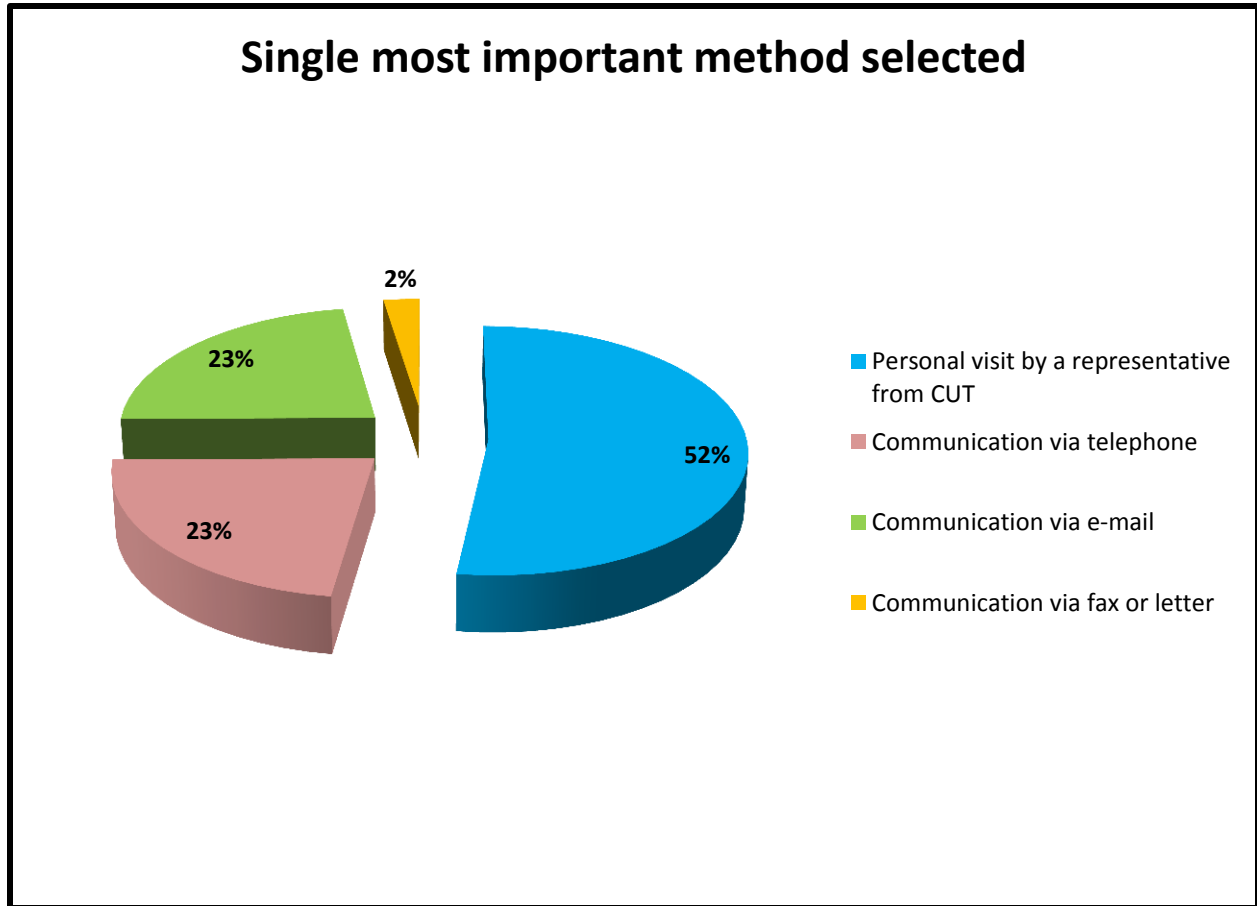
The importance attached to the various monitoring methods listed is indicated in Figure 8.22 and the results of the single most important method selected are displayed in Figure 8.23.





*Figure 8.22: Importance of monitoring methods*

The students were very clear in terms of their ratings of the various monitoring methods, as indicated above. A personal visit by a representative from CUT is the method students regard as essential, while the other methods proved to be only useful or even not necessary in the case of a fax or letter. These ratings are also well aligned with those of employers and lecturers. Whether this will hold true in terms of their selection of a single most important method is shown below in Figure 8.23.



*Figure 8.23: Monitoring method selected as the most important*

A personal visit by a representative from CUT is confirmed to be the most important monitoring method, based on the results presented in Figure 8.23. The ratings achieved for communication via telephone or e-mail also correspond with the students' preferences indicated in Figure 8.22.

The frequency of contact required with regard to monitoring is shown in Figure 8.24. The fact that contact via telephone or e-mail is required on a monthly basis is supportive of the need of students to receive contact on a personal basis. This is indicated to be at least on a quarterly basis, given that only 17% of the students deemed a personal visit on a semester basis sufficient. This is well aligned with the need of employers who require personal contact on at least a quarterly or semester basis.

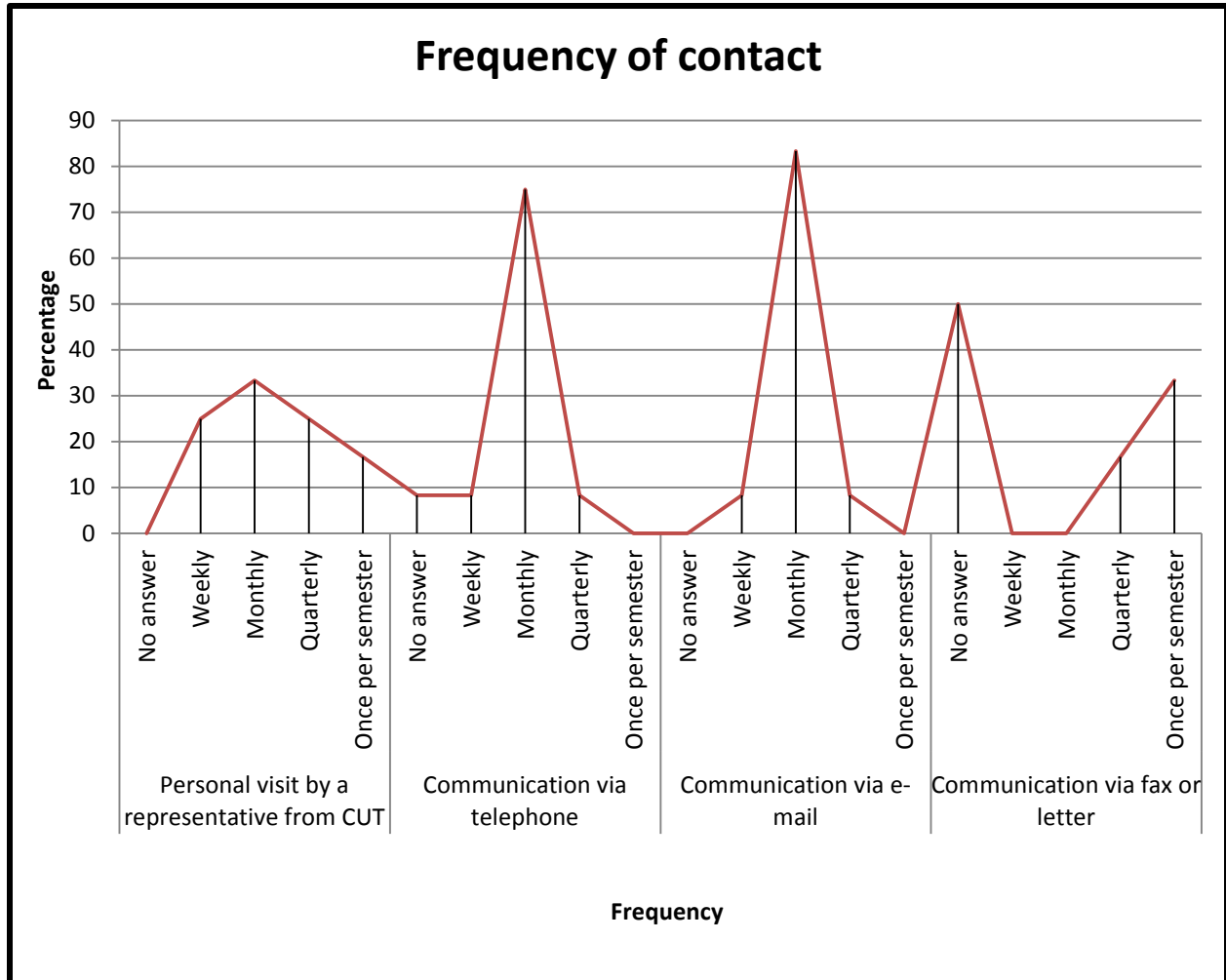


Figure 8.24: Frequency of contact required by students

(e) Mentoring and supervision by employers

Students' responses to how they should be mentored and supervised are indicated in Figure 8.25, while their opinions regarding how these functions can be enhanced are shown in Figure 8.26. As can be seen from the results below, no clear indication emerged with regard to how students should be mentored and supervised. The provision of both guidelines and templates to employers was the combination selected by students how best to enhance these functions.

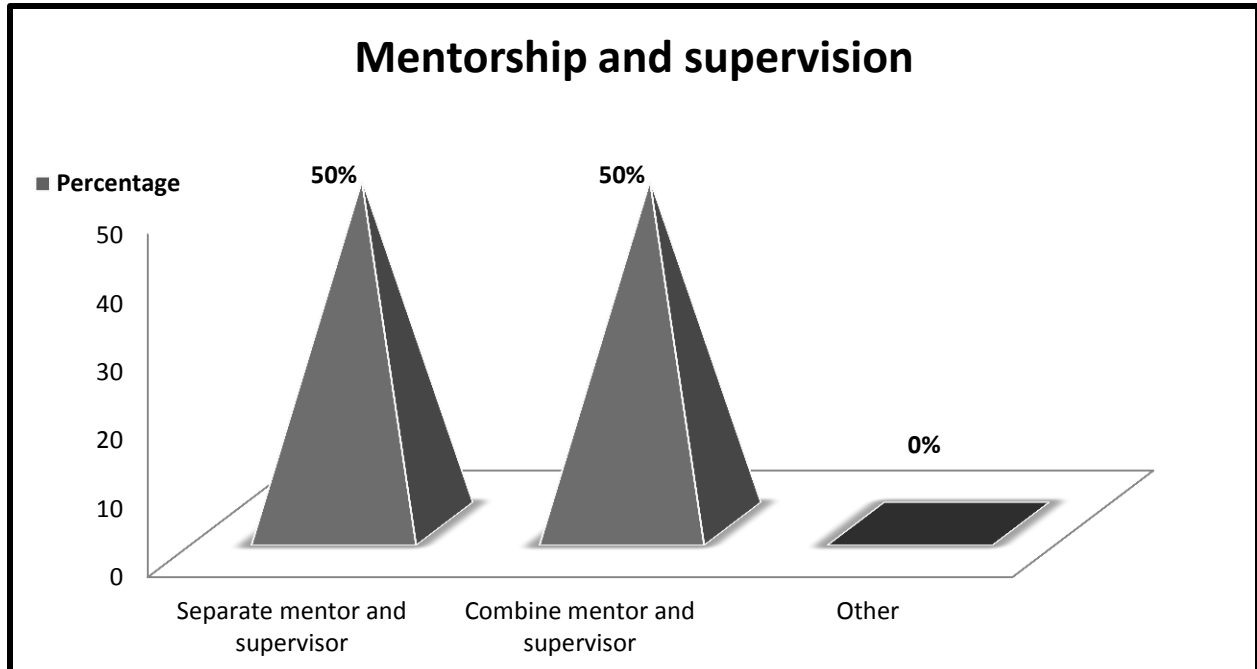


Figure 8.25: Combinations of mentorship and supervision indicated by students

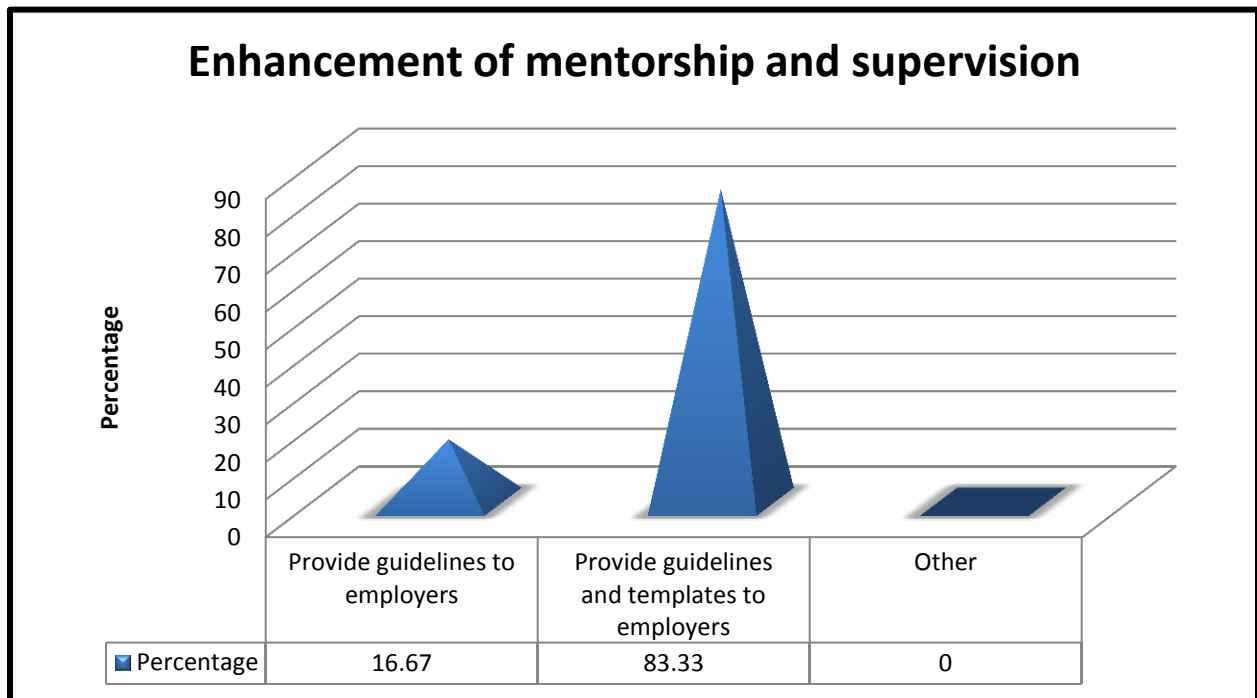


Figure 8.26: Methods to enhance the functions of mentorship and supervision

(f) Assessment by the university and employers

The ratings of students in respect of the essentiality of the assessment methods listed are indicated in Figure 8.27.

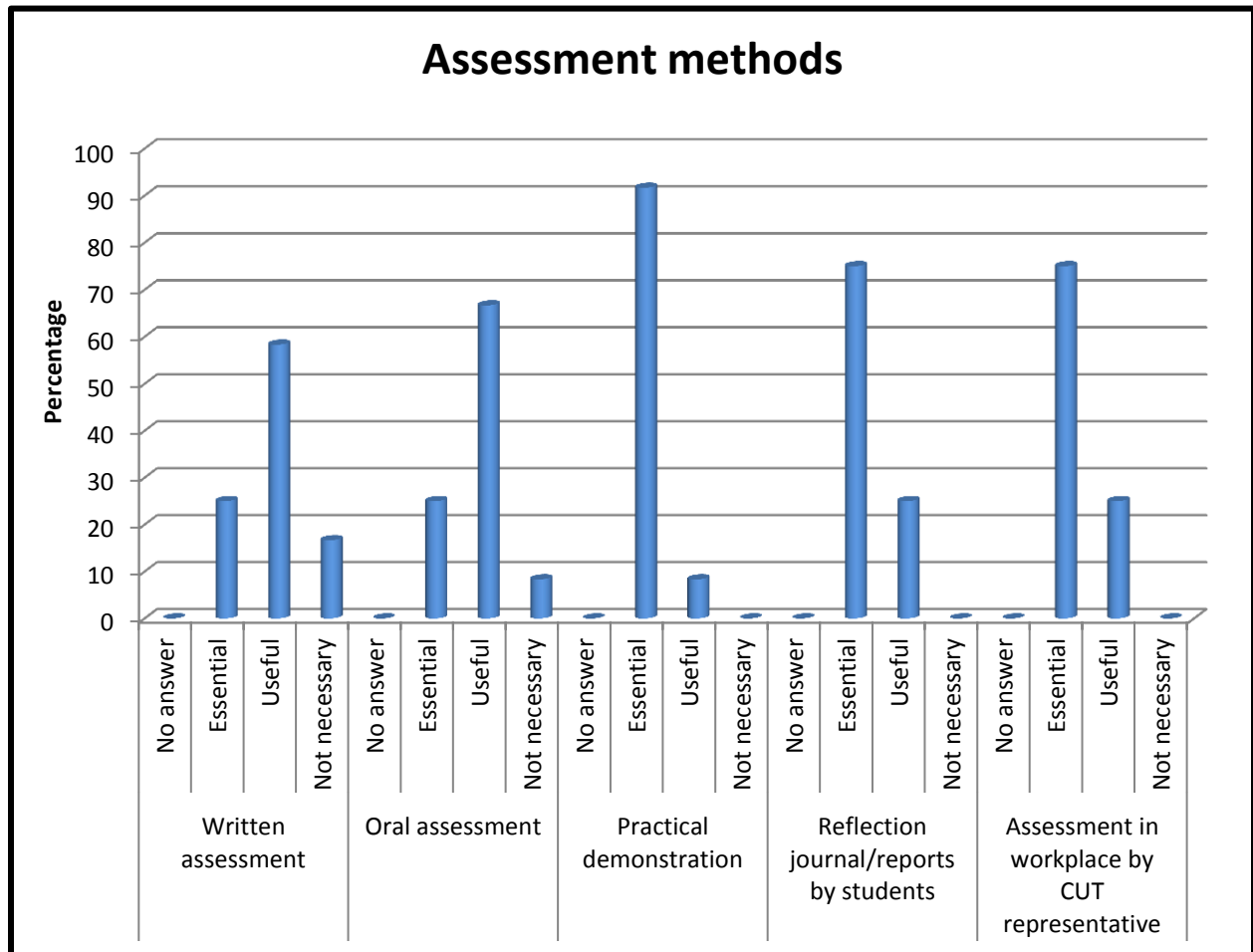
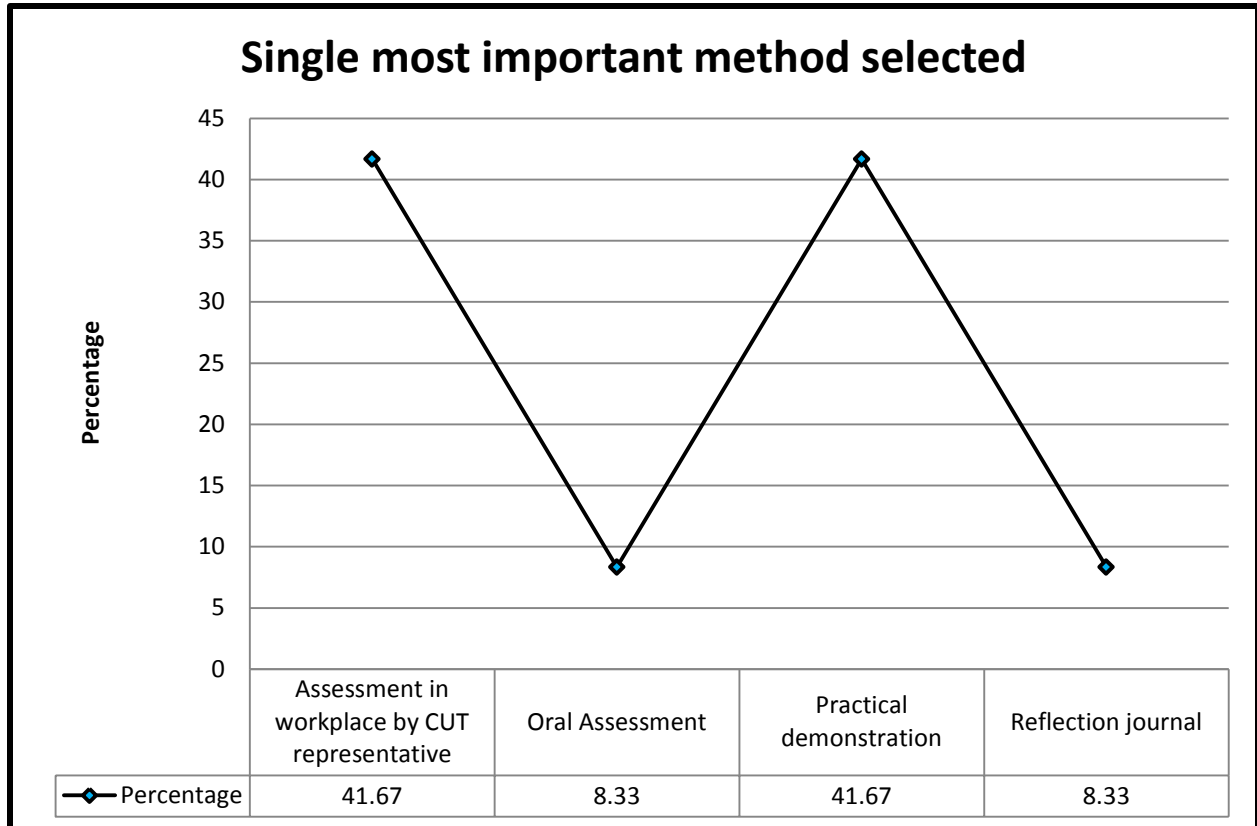


Figure 8.27: Assessment methods regarded by students as essential

Students view three (3) assessment methods to be essential, namely a practical demonstration as the most essential, as well as an assessment in the workplace by a CUT representative and a reflection journal/reports by students. Which one of these methods is regarded to be the most important is shown in Figure 8.28.



*Figure 8.28: Assessment method selected as the most important*

As indicated in Figure 8.28, a practical demonstration and an assessment in the workplace by a CUT representative cannot be separated in terms of importance. More clarity ought to be reached when the analyses per faculty and qualification are done.

The frequency with which assessment should be done in students' view is shown in Figure 8.29. As in the case of lecturers, a conclusion can be drawn from the frequency of assessments indicated. Apart from an assessment in the workplace, which is suggested to be quarterly, all the other methods of assessment need to be done in intervals of either a month or a week. The conclusion therefore is that students should first do a practical demonstration, and then talk about what they have learned while writing down and reflecting on what they have learned before they are assessed in the workplace by CUT.

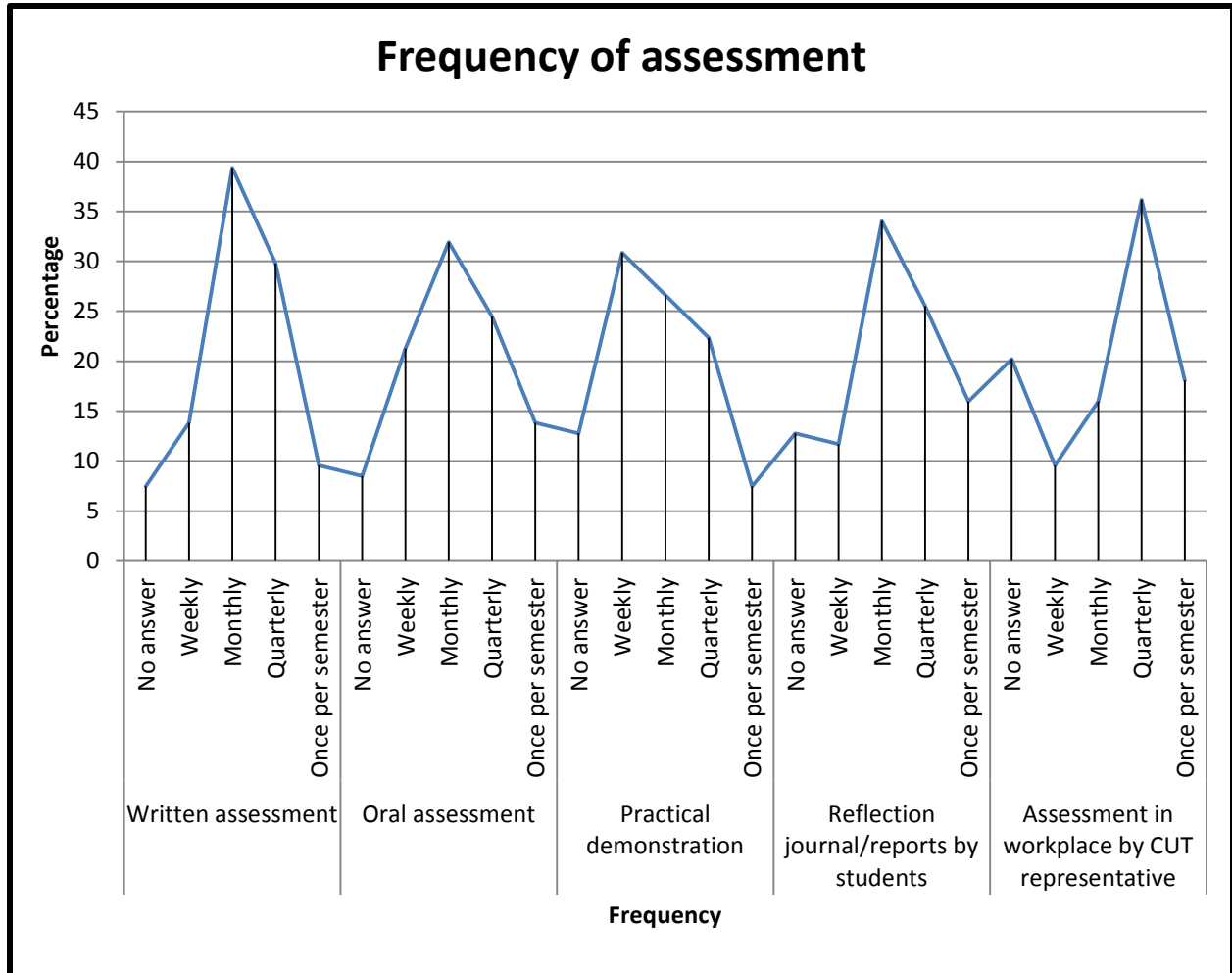


Figure 8.29: Frequency of assessment required by students

#### (g) Debriefing

Similar to what was required with regard to assessment methods students also had to indicate which of the debriefing methods listed in the questionnaire they regarded to be essential. They also had to select the single most important debriefing method from this list. An indication of the frequency of debriefing required had to be indicated as well. An analysis of the information provided by students in these respects is shown in Figures 8.30–8.32 below.

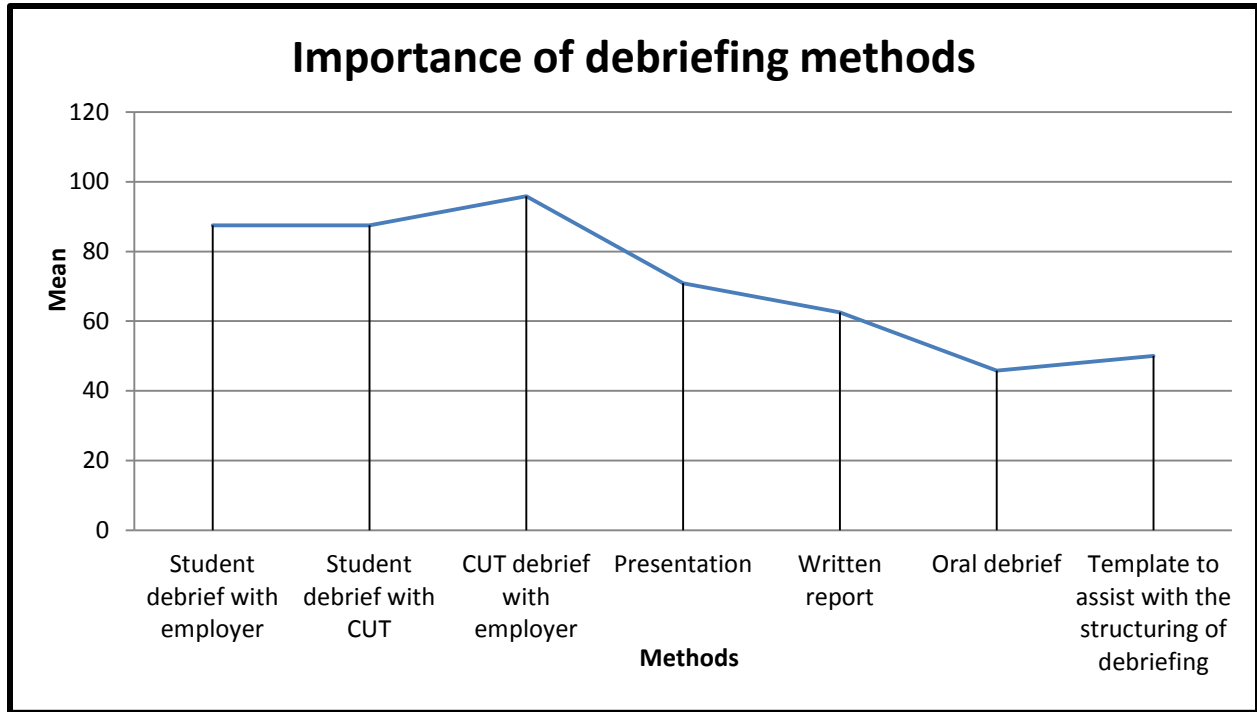


Figure 8.30: Debriefing methods regarded by students as essential

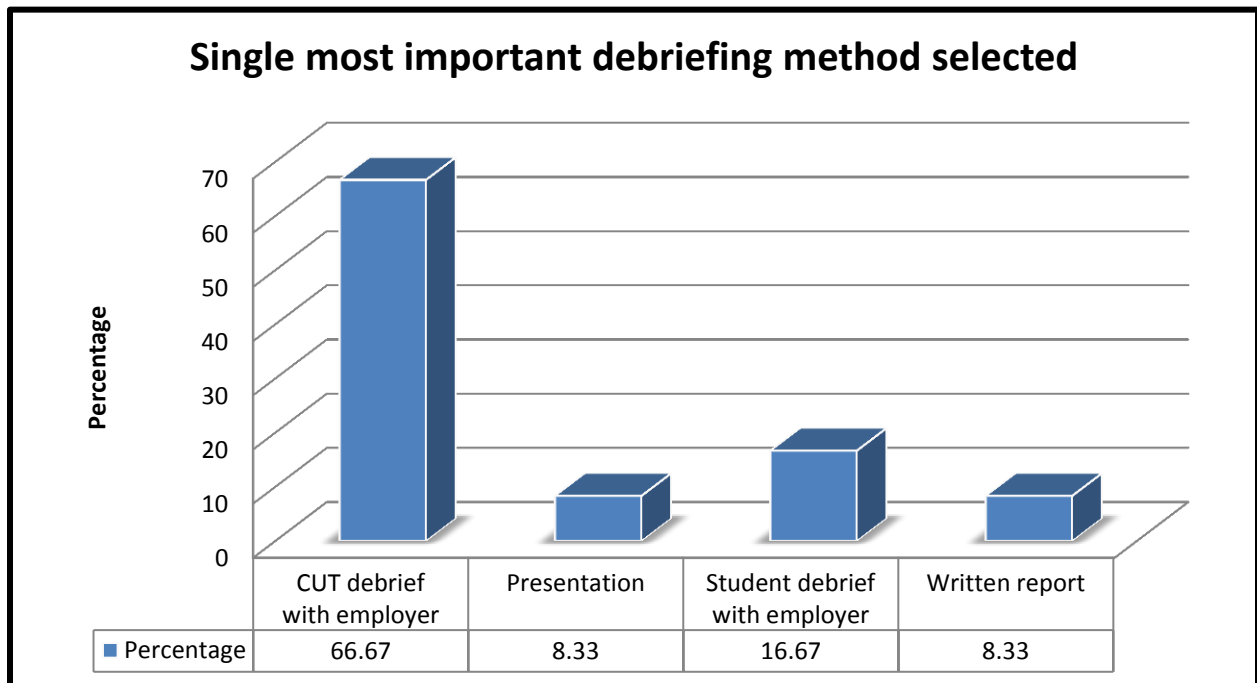
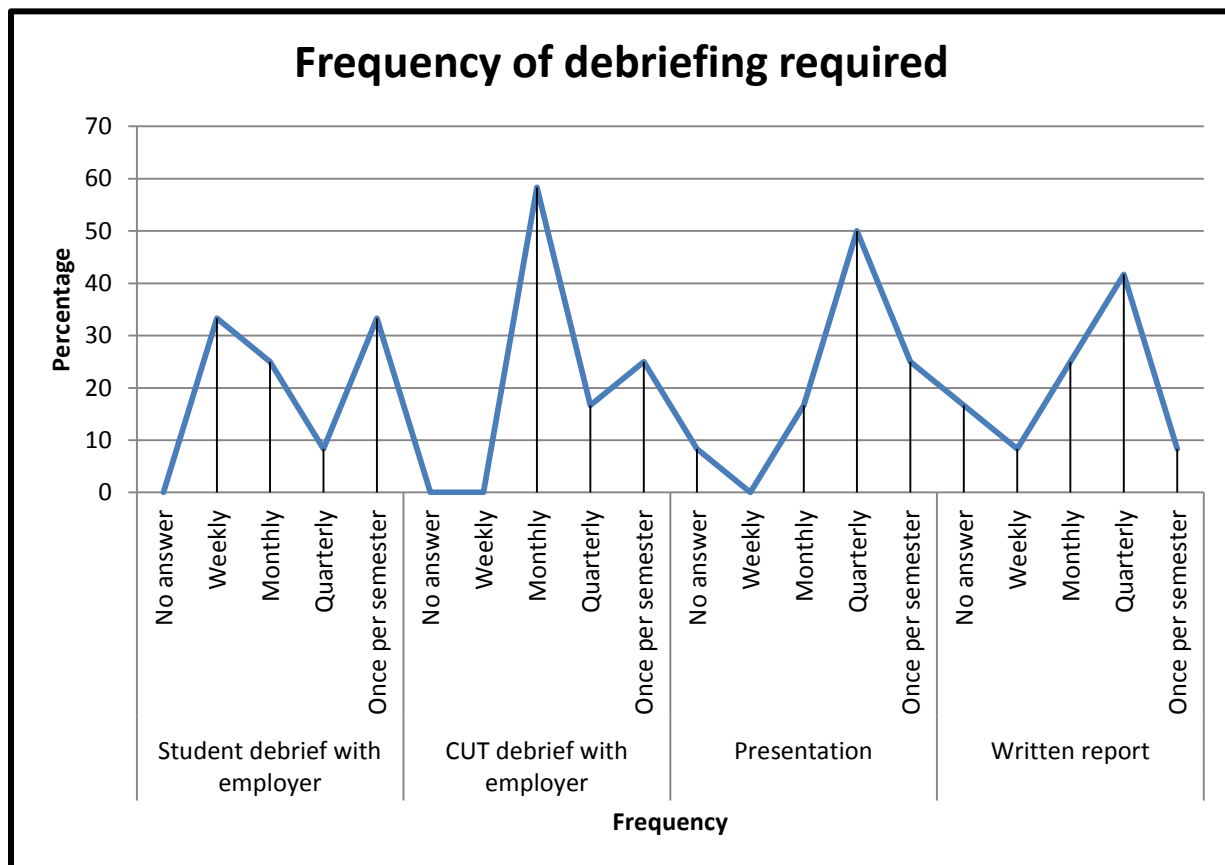


Figure 8.31: Debriefing method selected by students as the most important



The results displayed in Figures 8.30 and 8.31, respectively confirm the importance of a CUT debrief with employers. This is most probably linked with the importance that students have attached to an on-site assessment of employers with regard to the preparation of employers noted above. The big variances noticeable in both ranking orders, together with the differences in what was regarded as essential and most important, imply that only those methods regarded to be as both essential and important will be analysed in terms of the frequency of debriefing required in Figure 8.32 below.



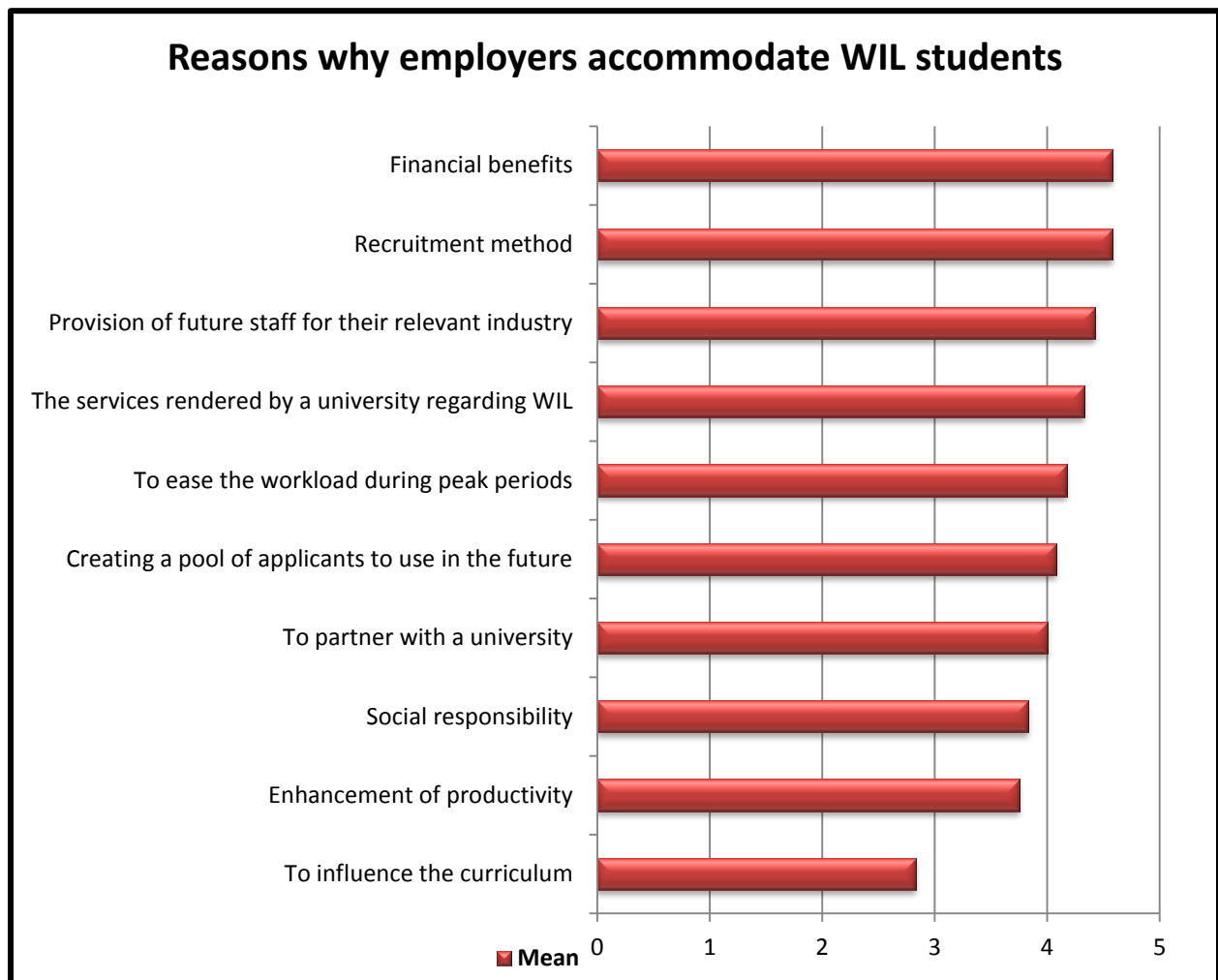
*Figure 8.32: Frequency of debriefing required by students*

In terms of the results presented above it seems that the frequency of debriefing required will be dictated by the method, since presentations and written reports are preferred on a quarterly basis, whereas a CUT debrief with employers needs to occur on a monthly basis. As a whole, it seems that debriefing needs to occur on at least a

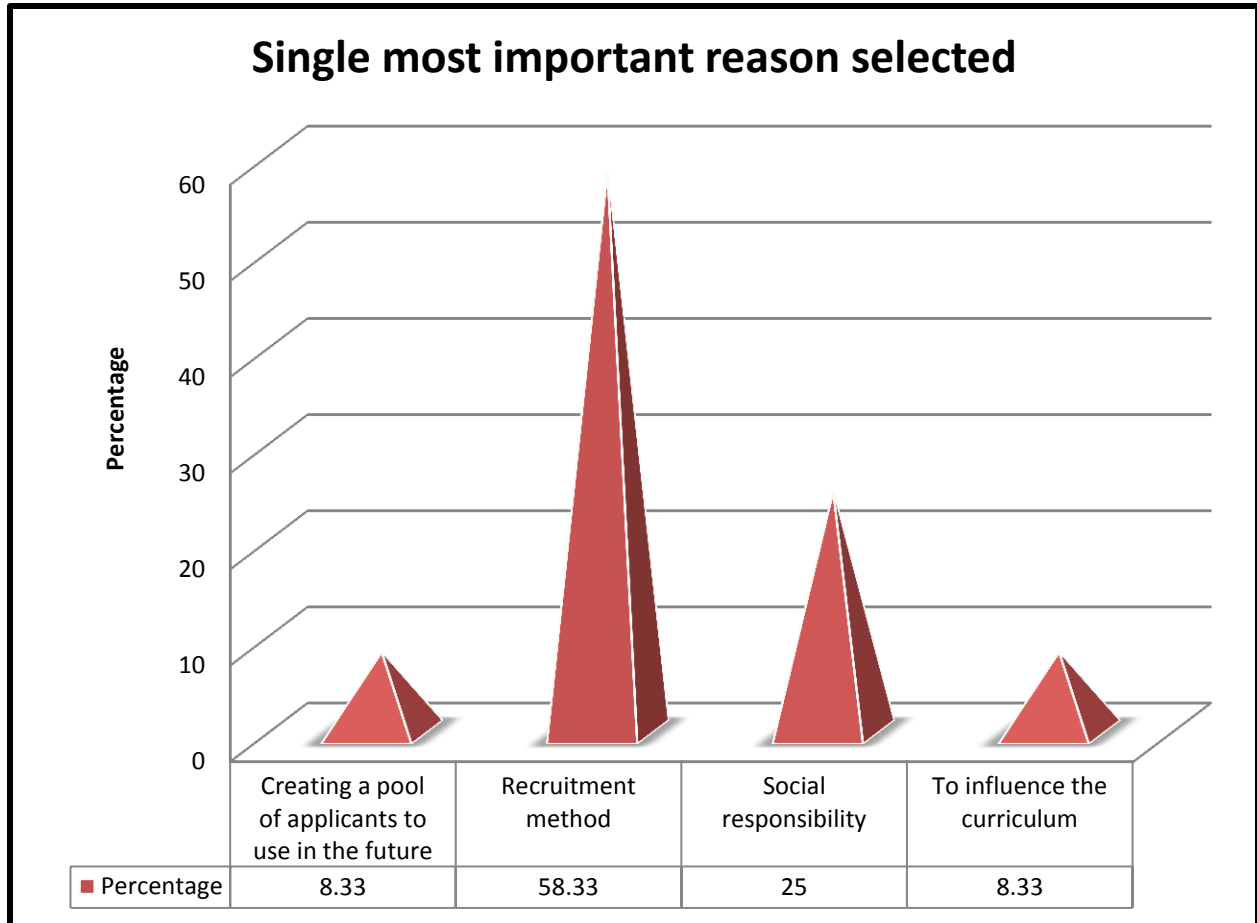
quarterly basis. The differences in the frequency required in terms of a student debrief with employers is most probably due to differences in requirements of qualifications.

### **Section D – General issues related to WIL**

Students' responses to the list of statements regarding why employers accommodate students for WIL are indicated in Figure 8.33. Their choices of the single most important reason why employers accommodate students for WIL are shown in Figure 8.34.



*Figure 8.33: Students' reasons why employers accommodate students for WIL*



*Figure 8.34: Reason selected by students as the most important why employers accommodate students for WIL*

Since there is no clear correlation between the ratings in both figures, the 5% principle was again applied to determine the top reasons why employers accommodate students for WIL in students' opinion. The only reason with a rating of at least 5% in Figure 8.34, which could be supported in importance from the mean scores Figure 8.33 is a recruitment method, which is then concluded to be the reason selected by students.

The results in Figure 8.35 below indicate students' responses to whether they are of the opinion that employers would prefer to appoint students in their organisations who completed WIL as opposed to students who did not complete WIL.

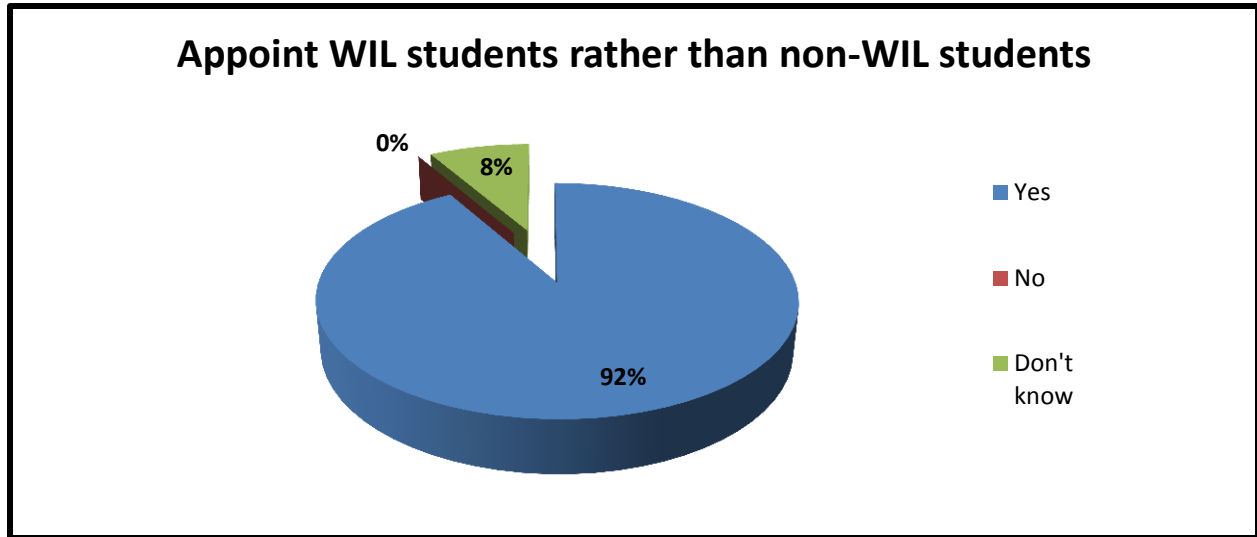


Figure 8.35: Preference to appoint WIL students rather than non-WIL students

The statistics in Figure 8.35 clearly indicate that students are of the opinion that employers would prefer to appoint WIL students rather than non-WIL students. Both students and employers were thus more convinced in this regard, than lecturers were. The reasons for the students' opinion above are displayed in Figure 8.36.

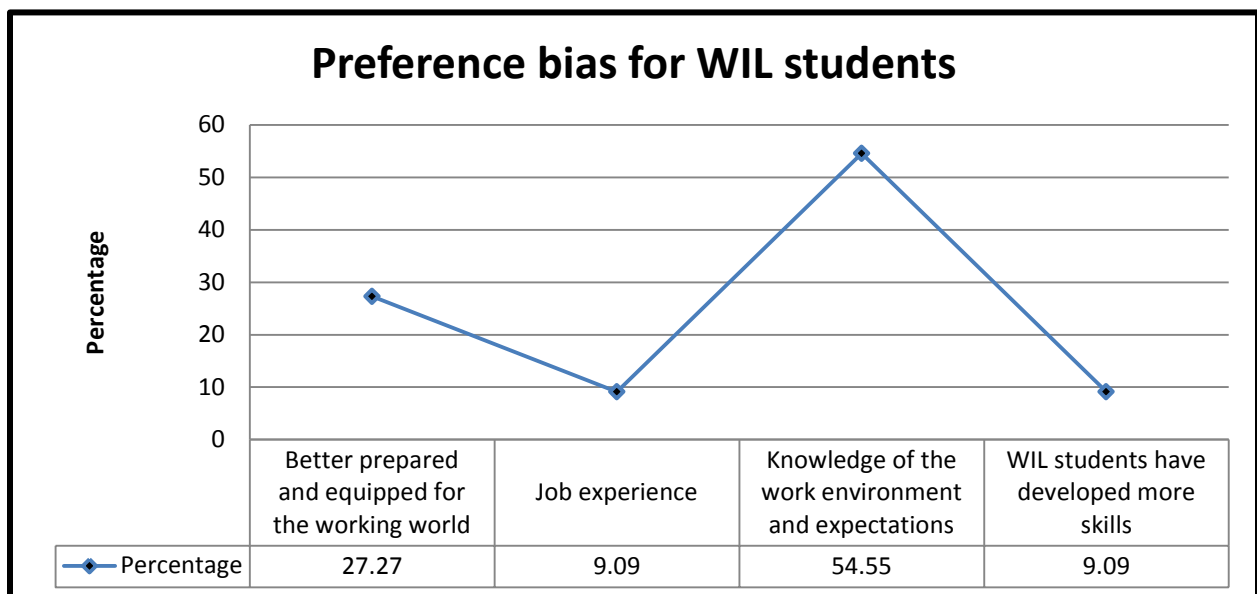
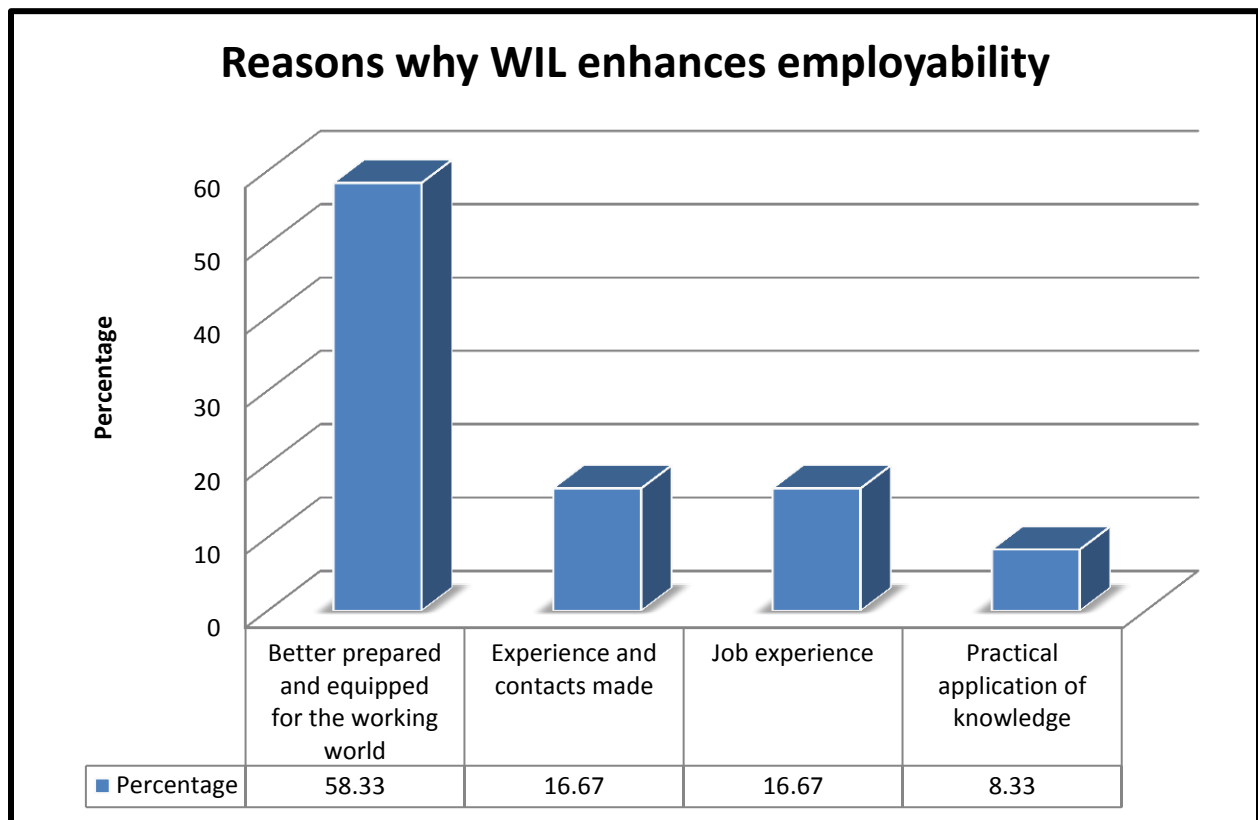


Figure 8.36: Reasons for employers' preference bias for WIL students, according to students

The two most important reasons indicated by students in Figure 8.36 is knowledge of the work environment and expectations and being better prepared and equipped for the working world. These reasons are also well aligned with the reasons provided by both employers and lecturers.

The students' views regarding what specifically about WIL enhances the employability of students are presented in Figure 8.37.

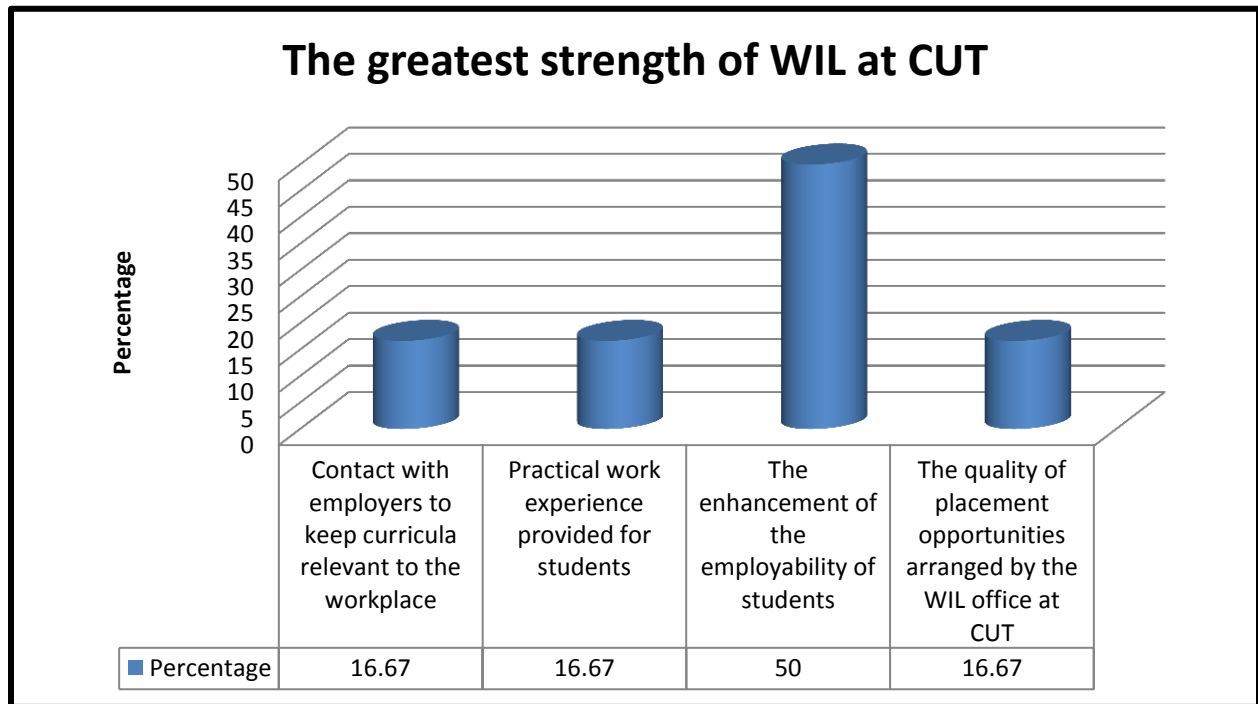


*Figure 8.37: Specific reasons why WIL enhances employability, according to students*

Being better prepared and equipped for the working world as well as job experience and contacts made are the most important reasons indicated in Figure 8.37 by students. In comparing these reasons with those provided by employers and lecturers it seems that the consensus is that being better prepared and equipped for the working world is the most important reason. The reasons of employers and lecturers were better aligned, though.

## **Section E – SWOT analysis**

Students' opinions regarding the greatest strengths, weaknesses, opportunities and threats for WIL at CUT are shown below in Figures 8.38–8.41. A SWOT template (Table 8.4) is used to present a summary of the most pertinent issues and trends identified.

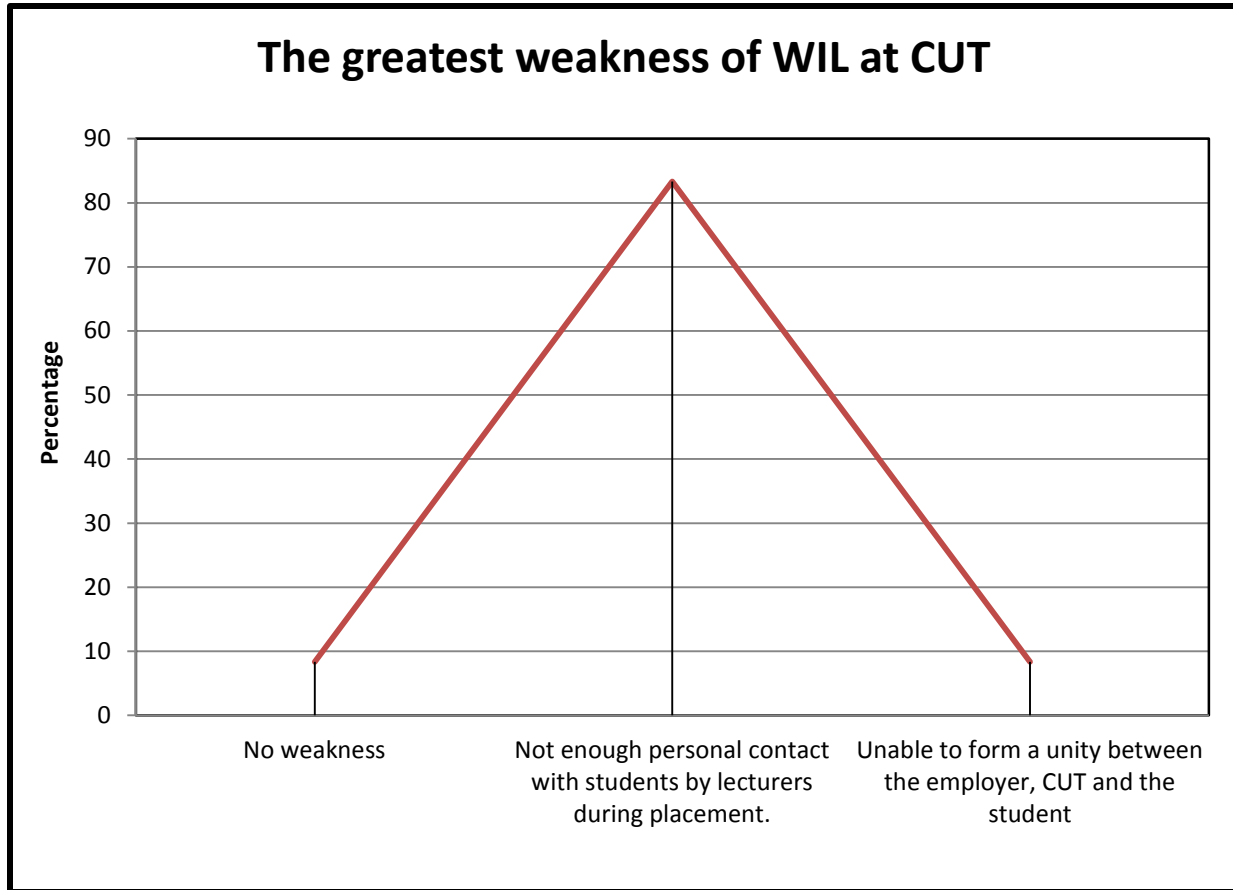


*Figure 8.38: The greatest strength of WIL at CUT, according to students*

The three greatest strengths of WIL at CUT, according to students, are:

- The enhancement of the employability of students.
- Contact with employers to keep curricula relevant to the workplace.
- Practical work experience provided for students.
- The quality of placement opportunities arranged by the WIL office at CUT.

Interesting to note is that students regard the enhancement of their own employability to be the greatest strength. Whether they will also include themselves in any weaknesses is revealed in Figure 8.39.



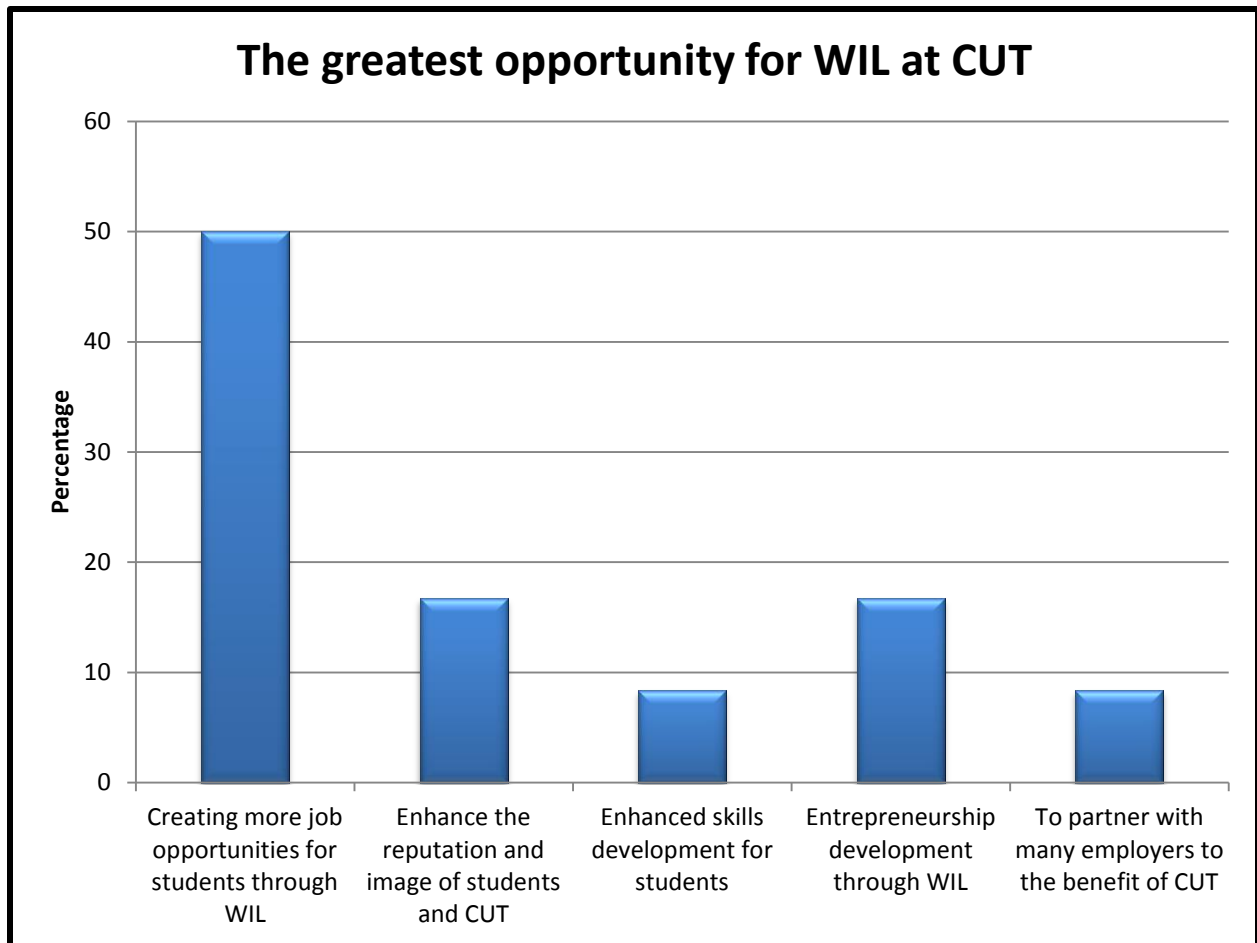
*Figure 8.39: The greatest weakness of WIL at CUT, according to students*

The greatest weaknesses of WIL at CUT according to students are:

- Not enough personal contact with students by lecturers during placement.

Interestingly enough, this was also a weakness pointed out by employers, namely a lack of personal contact during the monitoring of students.

Students' assessment of the greatest opportunities for WIL at CUT is indicated in Figure 8.40.



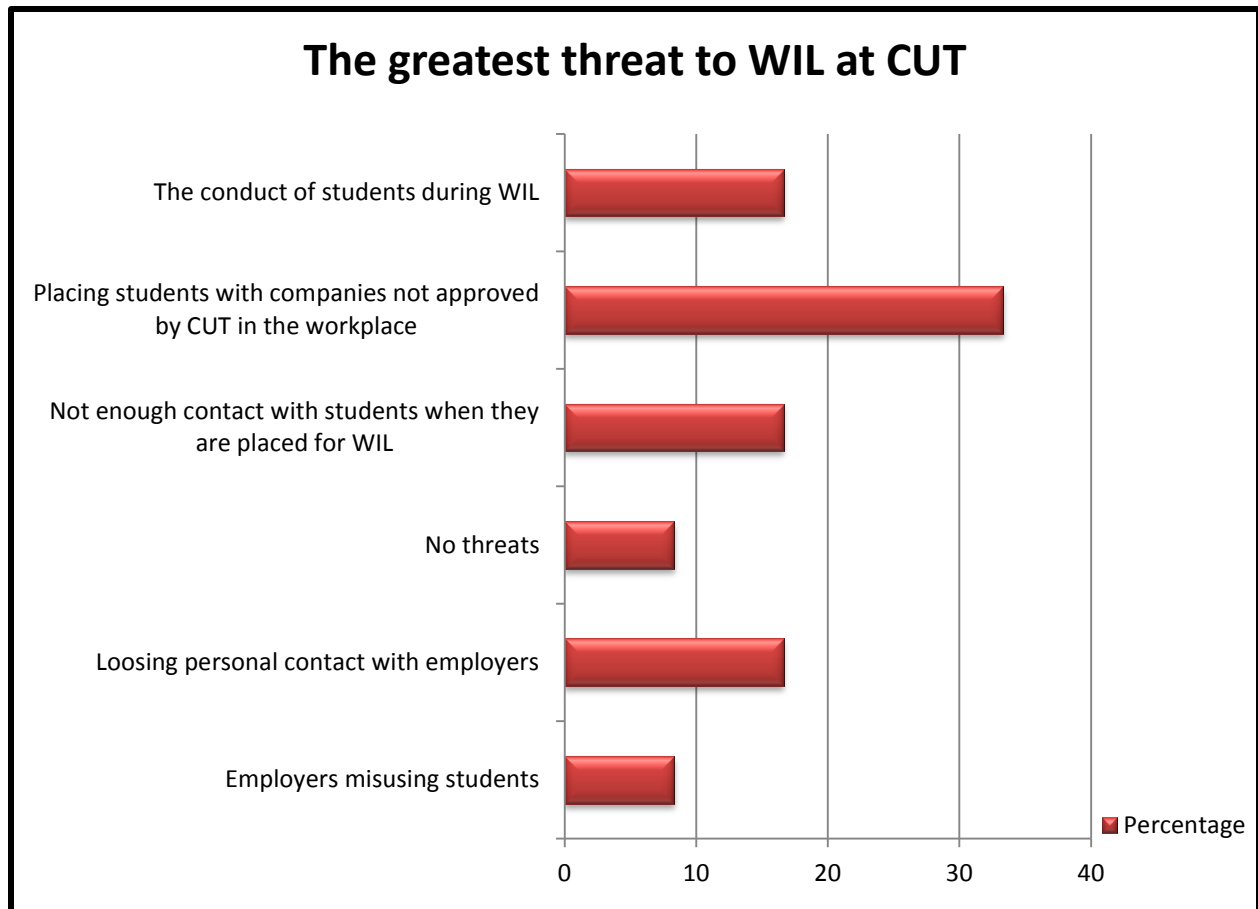
*Figure 8.40: The greatest opportunity for WIL at CUT, according to students*

The greatest opportunities for WIL at CUT according to students are to be found in the following:

- Creating more job opportunities for students through WIL.
- Enhance the reputation and image of students and CUT.
- Entrepreneurship development through WIL.

The greatest threats to WIL at CUT according to students are presented in Figure 8.41.





*Figure 8.41: The greatest threat to WIL at CUT, according to students*

The greatest threats to WIL at CUT have been indicated by students as the following:

- Placing students with companies not approved by CUT in the workplace.
- Losing personal contact with employers.
- Not enough contact with students when they are placed for WIL.
- The conduct of students during WIL.

The main issues identified are summarised in Table 8.4.

*Table 8.4: SWOT analysis of students*

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• The enhancement of the employability of students</li> <li>• Contact with employers to keep curricula relevant to the workplace</li> <li>• Practical work experience provided for students</li> <li>• The quality of placement opportunities arranged by the WIL office at CUT</li> </ul>	<ul style="list-style-type: none"> <li>• Not enough personal contact with students by lecturers during placement</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Creating more job opportunities for students through WIL</li> <li>• Enhance the reputation and image of students and CUT</li> <li>• Entrepreneurship development through WIL</li> </ul>	<ul style="list-style-type: none"> <li>• Placing students with companies not approved by CUT in the workplace</li> <li>• Losing personal contact with employers</li> <li>• Not enough contact with students when they are placed for WIL</li> <li>• The conduct of students during WIL</li> </ul>

### 8.3 SUMMARY OF PERTINENT ISSUES AND TRENDS REGARDING STUDENTS

A summary of all the pertinent issues and trends identified with regard to students are provided per section below.

#### **Section A – WIL rationale**

- An overall response rate of 80% was achieved with responses received for relevant qualifications in every faculty.
- Even though the students' experience of 8,4 months is not comparable with those of employers and lecturers, it can still be regarded as good experience, given the

duration of WIL components and the fact that it was mostly senior students who responded.

- The two (2) main reasons for including WIL as part of qualifications were preparation for the work environment and the application of theory in practice, which corresponds with the views of lecturers.
- Students have mainly learned three (3) things from WIL, namely the application of theory in practice, how to adapt to the demands of the workplace and people skills. The inclusion of additional aspects of a more personal nature pointed to a more holistic development picture than the one provided by lecturers at the same stage.
- Personal development and additional knowledge and skills developed were the aspects that students most valued about WIL. This could be due to students being regarded as the nexus of integrating theory and practice. It also corresponded with the link established with the development of work self-efficacy, which provides additional motivation for more detail that can be added to the specific ingredient of WIL that enhances the employability of students.
- The students were all of the opinion that WIL lead to an enhanced understanding of theory based on exposure to the practical application thereof in the workplace. This provides further proof in support of the value and impact of WIL as pedagogy as well as the academic benefits listed in the literature review.
- Students have returned from their WIL experience with increased confidence and more mature.
- A positive attitude, together with displaying maturity and acting responsibly, were the advice students would give to other students.

### **Section B – Skills and qualities of students and qualification structure**

- The students' ideal bucket of skills and qualities are attitude, communication, professional behaviour, subject matter expertise and work ethics.

- The skills and qualities identified must be included in the curriculum, predominantly by means of singular methods, of which a project is regarded to be the most important.
- To get the most out of WIL, qualifications should be structured in such a manner that students are placed for WIL for three (3) months during the second semester of the first, second and third year of study.

### **Section C – WIL quality cycle**

#### (a) Preparation of students

- The most important topics to include in the preparation of students for WIL are attitude, work ethics, communication and professional behaviour.

#### (b) Preparation of employers

- The only two issues to emerge from the students' responses are the clarification of expectations and, more importantly, an on-site assessment of the capabilities and suitability of employers.

#### (c) Placement process

- Students suggested that one representative from CUT should handle the placement process placements. They are generally not in favour of approaching employers on their own regarding placement. A CV, cover letter and interview, together with a recommendation from CUT, is the preferred method to introduce students for placement to employers. In the absence of CVs and interviews, students can also be allocated by CUT to employers, based on CUT's knowledge of the students and employers. Additional suggestions made were that students could do volunteer work or job shadowing at employers during holidays before they are placed.

(d) Monitoring by the university

- A personal visit by a representative from CUT is the method students regard as essential and most important with frequency of contact required on at least a quarterly basis, and well aligned with the need of employers.

(e) Mentoring and supervision by employers

- No clear indication emerged with regard to how students should be mentored and supervised. The provision of both guidelines and templates to employers was the combination selected by students how to best enhance these functions.

(f) Assessment by the university and employers

- A practical demonstration and an assessment in the workplace by a CUT representative are the most important assessment methods for students. A conclusion drawn was that students should first do a practical demonstration, talk about what they have learned while writing down and reflecting on what they have learned before they are assessed in the workplace by CUT.

(g) Debriefing

- A CUT debrief with employers was the most important method selected. The frequency of debriefing required will be dictated by the method, but it seems that debriefing is required on at least a quarterly basis.

**Section D – General issues related to WIL**

- A recruitment method was the reason selected by students as most important why employers accommodate students for WIL.
- Students were of the opinion that employers would prefer to appoint WIL students rather than non-WIL students, based predominantly on two (2) reasons; knowledge of the work environment and expectations, and being better prepared and equipped for the working world.

- Being better prepared and equipped for the working world as well as job experience and contacts made were the specific reasons provided by students why WIL enhances employability.

### **Section E – SWOT analysis**

#### Strengths:

- The enhancement of the employability of students.
- Contact with employers to keep curricula relevant to the workplace.
- Practical work experience provided for students.
- The quality of placement opportunities arranged by the WIL office at CUT.

#### Weaknesses:

- Not enough personal contact with students by lecturers during placement.

#### Opportunities:

- Creating more job opportunities for students through WIL.
- Enhancing the reputation and image of students and CUT.
- Entrepreneurship development through WIL.

#### Threats:

- Placing students with companies not approved by CUT in the workplace.
- Losing personal contact with employers.
- Not enough contact with students when they are placed for WIL.
- The conduct of students during WIL.

The individual analysis of all three (3) questionnaires has now been completed and summarised. The next step is to summarise and integrate the individual summaries into an institutional perspective in terms of the pertinent issues and trends identified in the

next chapter. The empirical analysis will be completed by an analysis of each of the stakeholders' opinions and ratings from a faculty and programme perspective within the context of the pertinent issues and trends identified on the institutional level.

## **CHAPTER 9**

# **A QUALITATIVE AND QUANTITATIVE ANALYSIS OF THE FINDINGS: AN INSTITUTIONAL, FACULTY AND PROGRAMME PERSPECTIVE**

### **9.1 INTRODUCTION**

It has to be borne in mind that the aim of this study is to formulate a strategy to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State. An integration of the summaries of the pertinent issues and trends identified with regard to employers, lecturers and students is therefore required to provide a broad overview of the opinions and ratings of each stakeholder to be able to identify the pertinent issues and trends for inclusion in the strategy on an institutional level. Once this has been done, the focus is narrowed down to an analysis on faculty and programme levels.

The employers' analysis is used as basis to determine the various perspectives due to the more comprehensive nature thereof in terms of questions and responses. Only the differences in opinions and ratings with the institutional indicators are reported on faculty and programme levels to avoid duplication as stated in Chapter 5. Since the sample of students and lecturers was limited to one programme per department with a compulsory WIL component due to the qualitative nature of their investigation, the number of programmes (15) is less than the number of programmes (19) that employers had responded to. The analysis of the employers per programme is therefore supplemented with the analysis of students and lecturers per programme in cases where the same programmes were responded to as applicable and relevant.

In addition, it needs to be noted, as mentioned in Chapter 5, that the literature review provided the broad framework for the study, as well as enabled the researcher to identify the relevant and key issues that require further investigation and analysis to be able to formulate the strategy concerned. The questionnaires were thus constructed from various perspectives, with questions grouped and clustered in accordance with the issues identified. This implies that the questionnaires did not follow the pattern and flow



of a strategy, which means that the pertinent issues and trends identified will first have to be re-arranged and aligned accordingly from an institutional perspective.

## 9.2 INSTITUTIONAL PERSPECTIVE

The rearrangement and alignment of the pertinent issues and trends are guided by the definition of a strategy adopted for this study, namely that:

- a strategy is defined as an understanding of where one is,
- a clear sense of where one wants to end up,
- an assessment of what stands in between,
- a decision about how to approach the challenge
- and a detailed course of action to undertake (Arauz 2014:2).

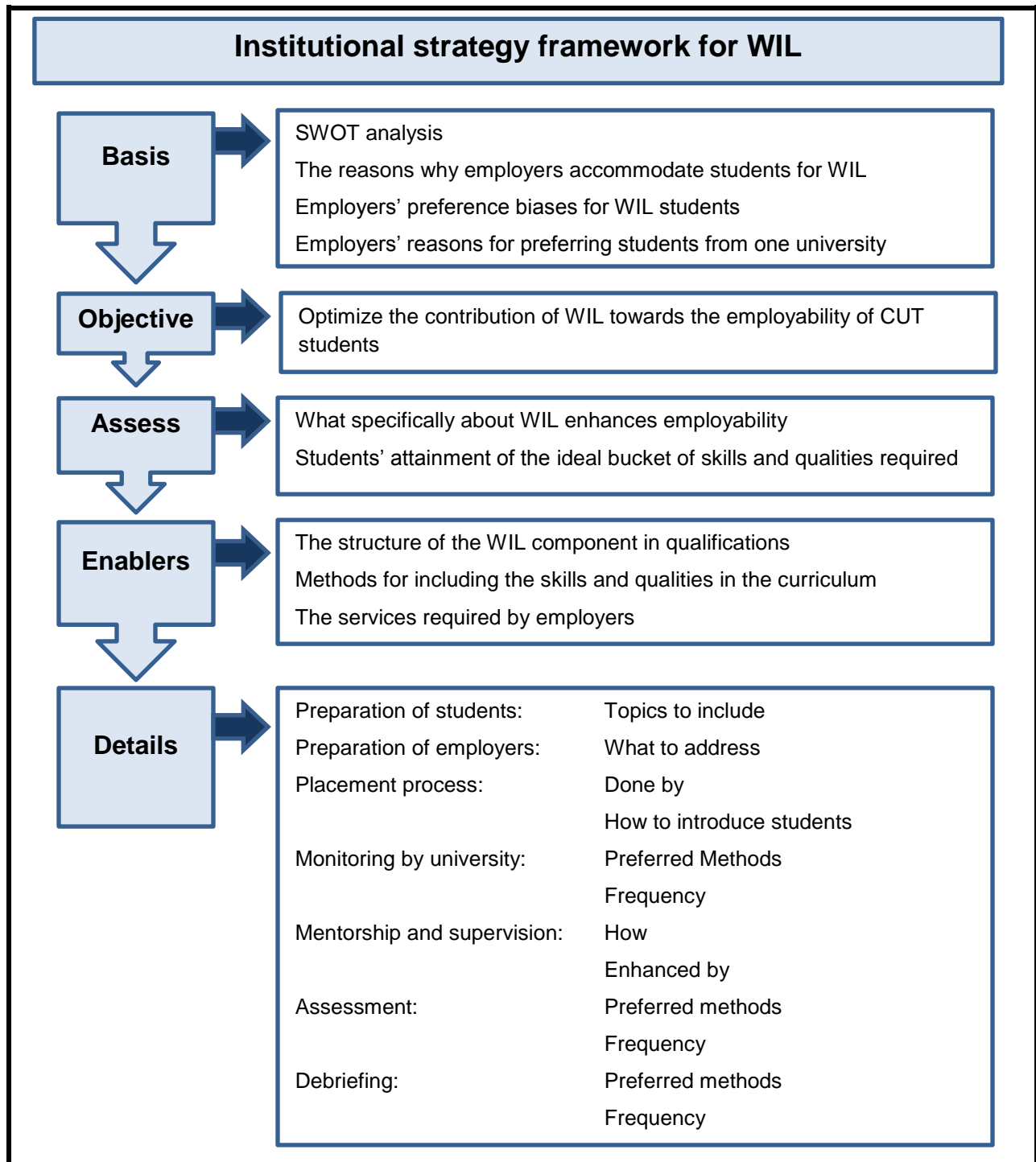
The pertinent issues and trends are therefore re-arranged and aligned with the definition stated as follows:

- i) An understanding of where one is what one needs to know to use as basis from which to start. This includes pertinent issues and trends with regard to the following:
  - a) SWOT analysis
  - b) The reasons why employers accommodate students for WIL
  - c) Employers' preference biases for WIL students
  - d) Employers' reasons for preferring students from one university to another
- ii) A clear sense of where one wants to end up is the objective to be achieved. In this case it would be the objective of this study:
  - a) To optimise the contribution of WIL towards the employability of CUT students
- iii) An assessment of what stands in between is to know what to address to achieve the objective. This includes pertinent issues and trends with regard to the following:

- a) What specifically about WIL enhances employability?
  - b) The ideal bucket of skills and qualities required and assessment rating of students in respect thereof.
- iv) A decision about how to approach the challenge is what can be used as enablers to facilitate the achievement of the objective. This includes pertinent issues and trends with regard to the following:
- a) The structure of the WIL component in qualifications
  - b) Methods for including the skills and qualities in the curriculum
  - c) The services required by employers
- v) A detailed course of action to undertake is about the specifics that need to happen. This includes pertinent issues and trends with regard to the following:
- a) WIL quality cycle

Based on this alignment, an institutional strategy framework template for WIL can be constructed as shown in Diagram 9.1. This framework will be used to present and integrate the individual summaries into an institutional perspective against which the faculty and programme analyses will also be compared to determine any relevant differences.

Diagram 9.1: An institutional strategy framework template for WIL



## I) Institutional summary

Frames and tables are used to present the summative institutional perspective to provide for ease of reading and presentation. As introduction to the institutional perspective for WIL below, there are certain issues to bear in mind and to take note of.

Significant issues to bear in mind:

- It has empirically been demonstrated that WIL does enhance the employability of CUT students.
- Employers prefer to appoint students who have completed WIL with them as opposed to students who did not complete any WIL.
- 50% of CUT students are employed at the employers where the students were placed for WIL.

General information to note:

- WIL is considered an important issue for employers given that more than two-thirds of decisions regarding WIL are taken at middle and top management levels predominantly by staff with more than five years' experience in WIL.
- Most employers (53,19%) are small in scale (1-50 employees) with a significant percentage (34,05%) that can be classified as large (employee numbers in excess of 100).
- Although employers are predominantly located in the Free State Province, CUT has WIL employers in every province of South Africa.
- Employers do have the capacity to accommodate more CUT students for WIL.

The results of the integration of the individual summaries into a summative institutional perspective regarding the pertinent issues and trends are presented below.

i) Basis

a) SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Good relationships between CUT and employers to keep curricula relevant by staying in contact with various industries' and real world demands</li> <li>• The dedication of CUT staff in programmes actively involved with WIL and the quality of placements arranged by the WIL office driving it</li> <li>• Providing well-prepared and more employable students for the future</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of personal contact with employers and students by lecturers during the monitoring of WIL</li> <li>• Coordination and time management of elaborate administrative WIL processes</li> <li>• Not enough employers for WIL</li> <li>• The level of preparation of students for WIL and the calibre of students placed</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Build strong personal as well as strategic relationships with commerce, industry and the public sector to create more job opportunities through WIL</li> <li>• Better prepared and equipped students for the working world through close contact and feedback from employers</li> <li>• Enhance the national and international image of students and CUT.</li> <li>• Entrepreneurship development through WIL</li> </ul>	<ul style="list-style-type: none"> <li>• Competence levels and negative attitude of students</li> <li>• Loosing personal contact and feedback from employers, which could make curricula and the approval of employers for placement irrelevant</li> <li>• Not matching students with employers' profiles and expectations with insufficient contact with students when they are placed for WIL</li> <li>• The limited number of WIL opportunities in Bloemfontein and Welkom and competition from other universities</li> </ul>

b) The reasons why employers accommodate students for WIL

- Social responsibility
- Provision of future staff for their relevant industry
- Use WIL as a recruitment method
- To create a pool of applicants to use in the future

c) Employers' preference biases for WIL students

- Students' knowledge of the work environment and expectations
- Students' practical job experience
- Employers have time to assess and mould a person as a future employee
- Better prepared and equipped for the working world

d) Employers' reasons for preferring students from one university to another

- The competence and commitment of students
- The quality of the relationship with the university
- Personal contact provided by the university

**The ideal WIL student profile** that employers want is a competent and committed student with a positive attitude who is well prepared for WIL.

ii) Objective

a) Purpose of the study

- To optimise the contribution of WIL towards the employability of CUT students

iii) Assessment

a) What specifically about WIL enhances employability?

- Knowledge of the work environment and expectations

- Job experience
- Students who are better prepared and equipped for the working world

The conclusion is therefore made that knowledge of the work environment and expectations gained through the unique job experience that WIL provides enhances the personal development of students as well as additional knowledge and skills to be better prepared and equipped for the working world, which can be regarded as **the specific ingredient about WIL that enhances employability.**

- b) The ideal bucket of skills and qualities required and assessment ratings of students in respect thereof (only ratings of employers and lecturers were considered to ensure objectivity).

- Attitude (4/5)
- Subject matter expertise (3/5)
- Work ethics (3/5)
- Communication (3/5)
- People skills (4/5)
- Professional behaviour (3,5/5)

**A graduate student** with a positive attitude and exemplary conduct coupled with a good degree of subject matter expertise therefore seems to be the ideal combination employers are looking for.

iv) Enablers

- a) The structure of the WIL component in qualifications

- Students should be placed for WIL for three (3) months during the second semester of the first, second and third year of study.

- b) Methods for including the skills and qualities in the curriculum

- Module
- Project
- Simulation

- Case study
- Simulation and case study
- Module, simulation, project and case study
- Simulation and project

c) The services required by employers

- A relationship of trust and respect built through personal contact
- Professional and regular communication and support before and during the placement period
- Thoroughly prepared students that meet the expectations and standards of employers

v) Details

a) WIL quality cycle

Preparation of students	<u>Topics to include:</u> <ul style="list-style-type: none"> <li>• Work ethics</li> <li>• Professional behaviour</li> <li>• Attitude</li> <li>• Responsibility</li> <li>• Expectations from the workplace</li> <li>• Communication</li> </ul>
Preparation of employers	<u>What to address:</u> <ul style="list-style-type: none"> <li>• The clarification of expectations of CUT, students and employers (with training provided to employers where necessary)</li> <li>• Regular communication, which needs to start well in advance of the commencement of the placement period</li> <li>• The provision of clear written outcomes to be achieved</li> <li>• Establish a relationship of trust through regular personal contact</li> <li>• Match students with the needs of employers</li> </ul>



	<ul style="list-style-type: none"> <li>An on-site assessment of the capabilities and suitability of employers</li> </ul>
Placement process	<u>Done by:</u> <ul style="list-style-type: none"> <li>One representative from CUT</li> <li>Students approaching employers on their own for placement should be avoided</li> </ul>
	<u>How to introduce students:</u> <ul style="list-style-type: none"> <li>A CV, cover letter and interview together with a recommendation from CUT is the preferred method to introduce students for placement to employers</li> <li>In the absence of CVs and interviews, students can also be allocated by CUT to employers based on CUT's knowledge of the students and employer</li> <li>Volunteer work or job shadowing at employers during holidays</li> </ul>
Monitoring by CUT	<u>Preferred methods:</u> <ul style="list-style-type: none"> <li>A personal visit by a representative from CUT is confirmed to be the most important monitoring method</li> </ul>
	<u>Frequency:</u> <ul style="list-style-type: none"> <li>Employers and students need to be visited on at least a quarterly or semester basis</li> </ul>
Mentorship and supervision	<u>How:</u> <ul style="list-style-type: none"> <li>Combining mentorship and supervision is the preferred method</li> </ul>
	<u>Enhanced by:</u> <ul style="list-style-type: none"> <li>Providing employers with guidelines and templates to complete to ensure objectivity and consistency</li> </ul>
Assessment	<u>Preferred methods:</u> <ul style="list-style-type: none"> <li>Practical demonstration</li> <li>Assessment in workplace by CUT representative</li> <li>Written assessment</li> <li>Reflection journal/reports by students</li> </ul>
	<u>Frequency:</u>

	<ul style="list-style-type: none"> <li>• Practical demonstration <ul style="list-style-type: none"> <li>○ Weekly/monthly</li> </ul> </li> <li>• Assessment in workplace by CUT representative <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> <li>• Written assessment <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> <li>• Reflection journal/reports by students <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> </ul>
Debriefing	<u>Preferred methods:</u> <ul style="list-style-type: none"> <li>• Student debrief with CUT</li> <li>• Student debrief with employer</li> <li>• CUT debrief with employer</li> <li>• Written report</li> </ul>
	<u>Frequency:</u> <ul style="list-style-type: none"> <li>• Student debrief with CUT <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> <li>• Student debrief with employer <ul style="list-style-type: none"> <li>○ Monthly</li> </ul> </li> <li>• CUT debrief with employer <ul style="list-style-type: none"> <li>○ Quarterly</li> </ul> </li> <li>• Written report <ul style="list-style-type: none"> <li>○ Quarterly</li> </ul> </li> </ul>

With the institutional perspective completed the focus is narrowed down to an analysis of each of the stakeholders' opinions and ratings from a faculty and programme perspective as it relates to the pertinent issues and trends identified on the institutional level.

### 9.3 FACULTY AND PROGRAMME ANALYSIS

The opinions and ratings of all three stakeholders were combined in this analysis. Only the differences in opinions and ratings with regard to the institutional indicators are

reported though to avoid duplication as previously stated. The results used for these levels also stem from the data analyses above and represent different perspectives on and clusters of the same data gathered and already analysed. It is therefore not necessary to explain the methodology of the analysis again.

To determine the differences, the following approach was used:

- The statistician refined the analysis of the data to faculty and programme specific responses. For example, the responses of employers were clustered per faculty and programme to determine what the views of employers of students in each relevant faculty and programme were with regard to how students should be prepared for WIL, what should be done with employers, how should the assessment be done, etc. The same approach was followed for lecturers and students.
- The data of employers, lecturers and students were then compared with the institutional indicators above to determine if any differences existed that needed to be taken into consideration on the faculty and programme levels regarding how students should be prepared for WIL, what should be done with employers, how should the assessment be done, etc., as indicated in the example above.

Differences could be determined with regard to the ideal bucket of skills and qualities required, together with the ratings achieved by students in respect thereof, the structure of the WIL component in qualifications as well the WIL quality cycle. These differences are presented in tables below as specific indicators per faculty and relevant programmes per department.

The complete bucket of skills and qualities together with ratings achieved are presented to provide for an overall assessment per faculty and programme as the starting point. The institutional perspective is also presented on faculty level for ease of reference with differences highlighted in bold typeface.

Since the analysis on programme level represents a third-level analysis, the bucket of skills and qualities required, together with the ratings in respect thereof is presented, as

it was determined on this level. This is due to the interchangeable nature of what is included in the bucket as well as differences in ratings on all three levels of analysis. The differences reported with regard to the structure of WIL qualifications and the WIL quality cycle was determined to be different from faculty level, which already represents a refinement from the institutional level.

### 9.3.1 Faculty of Engineering and Information Technology

The tables below contain indicators that are more specific for this faculty and programmes grouped per department.

*Table 9.1: Faculty of Engineering and Information Technology specific indicators*

Ideal bucket of skills and qualities required and assessment ratings			
CUT		Faculty	
Attitude	4/5	Attitude	<b>3/5</b>
Subject matter expertise	3/5	Subject matter expertise	3/5
Work ethics	3/5	Work ethics	3/5
Communication	3/5	Communication	<b>2/5</b>
People skills	4/5	<b>Innovative</b>	3,5/5
Professional behaviour	3,5/5	Professional behaviour	<b>4/5</b>
Structure of the WIL component			
Students should be placed for WIL for one (1) year during the third year of study or for six (6) months during the second semester of the second and third year of study.			
WIL quality cycle			
Preparation of students	Communication must be replaced with teamwork.		
Monitoring by CUT	Employers and students need to be visited on a quarterly basis.		
Mentorship and supervision	Separate mentors and supervisors are favoured.		
Assessment: frequency	Assessment in the workplace by a CUT representative must be done on at least a quarterly or semester basis.		
Debriefing: frequency	Student debrief with CUT needs to happen quarterly.		

*Table 9.2: Department of Built Environment specific indicators*

Building			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Students should be placed for WIL for three (3) months during the second semester of the first year and the whole year during the second year of study.	Combining mentorship and supervision is preferred.
Subject matter expertise	2/5		
Computer literate	3/5		
Communication	2/5		Assessment: a practical demonstration is required on a weekly basis.
People skills	2/5		
Team work	3/5		

*Table 9.3: Department of Civil Engineering specific indicators*

Civil Engineering			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Students should be placed for WIL for six (6) months during the second semester of the second and third year of study.	Combining mentorship and supervision is preferred.
Subject matter expertise	2,5/5		
Work ethics	2/5		
Communication	2/5		
Leadership and management	3/5		
Team work	3,5/5		

*Table 9.4: Department of Electrical, Electronic and Computer Engineering specific indicators*

Computer Systems Engineering			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	2/5	Students should be placed for WIL for six (6) months during the second semester of the second and third year of study.	Assessment: a practical demonstration is required on a monthly basis.
Subject matter expertise	2/5		
Work ethics	3,5/5		
Communication	2/5		
Professional behaviour	4/5		
Innovative	4/5		

Electrical Engineering			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the first and second year and for six (6) months during the second semester of the third year of study.	Assessment: reflection reports need to be completed on a monthly basis.
Subject matter expertise	3/5		
Innovative	4/5		
Communication	2/5		
People skills	3/5		
Professional behaviour	4,5/5		

Table 9.5: Department of Mechanical and Mechatronic Engineering specific indicators

Mechanical Engineering			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the first and second year and for six (6) months during the second semester of the third year of study.	Assessment: a practical demonstration is required on a quarterly basis.
Subject matter expertise	3,5/5		
Work ethics	2/5		
Communication	1/5		
Professional behaviour	4/5		
Innovative	3,5/5		

### 9.3.2 Faculty of Health and Environmental Sciences

The specific indicators for this faculty and programmes per department are indicated in the tables below.

Table 9.6: Faculty of Health and Environmental Sciences specific indicators

Ideal bucket of skills and qualities required and assessment ratings			
CUT		Faculty	
Attitude	4/5	Attitude	4/5
Subject matter expertise	3/5	Subject matter expertise	2/5
Work ethics	3/5	Work ethics	2,5/5
Communication	3/5	Respect	3,5/5
People skills	4/5	People Skills	4/5
Professional behaviour	3,5/5	Professional behaviour	3/5
Structure of the WIL component			
Students should be placed for WIL for three (3) months during the first year and the whole year during the second and third year of study.			
WIL quality cycle			
Monitoring: frequency	Employers and students need to be visited on a monthly or at least quarterly basis.		
Assessment: frequency	Written assessments are to be completed on a quarterly basis.		
Debriefing: frequency	Written reports are required on a quarterly or semester basis.		

Table 9.7: Department of Agriculture specific indicators

Agricultural Management			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Students should be placed for WIL for three (3) months during the second semester of the first year and for one (1) year during the second year of study.	Placement process: Students to be allocated by CUT to employers based on CUT's knowledge of the students and employer.
Subject matter expertise	3/5		
Innovative	3/5		
Team work	3/5		
People skills	3/5		
Professional behaviour	4/5		

Table 9.8: Department of Health Sciences specific indicators

Biomedical Technology			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for six (6) months during second semester of the third year of study.	Assessment in the workplace by a CUT representative needs to be done on a semester basis.
Subject matter expertise	2/5		
Work ethics	2,5/5		
Respect	3/5		
People skills	4/5		
Professional behaviour	3,5/5		
Clinical Technology			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the first and second year and for one (1) year during the third year of study.	Separate mentors and supervisors are favoured.
Subject matter expertise	3/5		
Work ethics	3/5		
Emotional maturity	2,5/5		
People skills	4/5		
Professional behaviour	3,5/5		
Somatology			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Students should be placed for WIL for six (6) months during the second semester of the second and third year of study.	A student debrief with an employer preferably on a quarterly basis.
Subject matter expertise	3/5		
Work ethics	4/5		
Teamwork	4/5		
People skills	3/5		
Professional behaviour	3/5		



Table 9.9: Department of Life Sciences specific indicators

Dental Assisting			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4,5/5	Students should be placed for WIL for three (3) months during the second semester of the first year of study.	Monitoring: Employers and students need to be visited on at least a monthly basis.
Subject matter expertise	4/5		
Work ethics	2/5		
Respect	4/5		Debriefing: Written reports need to be completed on a monthly basis.
People skills	4/5		
Professional behaviour	3/5		

Table 9.10: Department of Clinical Sciences specific indicators

Radiography			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the first year and for six (6) months during the second semester of the second and third year of study. (Same as faculty level)	No differences with faculty indicators.
Subject matter expertise	2/5		
Work ethics	2/5		
Respect	3/5		
People skills	4/5		
Professional behaviour	3/5		
Emergency Medical Care			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	2/5	Students should be placed for WIL for six (6) months during the second semester of the first, second and third year of study.	Separate mentors and supervisors are favoured.
Subject matter expertise	2/5		
Work ethics	2/5		
Respect	2/5		Assessment in the workplace by a CUT representative is required on a weekly basis.
People skills	2/5		
Professional behaviour	1/5		

### 9.3.3 Faculty of the Humanities

The tables below contain indicators that are more specific for this faculty and programmes, grouped per department.

Table 9.11: Faculty of Humanities specific indicators specific indicators

Ideal bucket of skills and qualities required and assessment ratings			
CUT		Faculty	
Attitude	4/5	Attitude	3/5
Subject matter expertise	3/5	Subject matter expertise	3/5
Work ethics	3/5	<b>Diligence</b>	<b>3/5</b>
Communication	3/5	Communication	3/5
People skills	4/5	People Skills	3/5
Professional behaviour	3,5/5	Professional behaviour	3/5
<b>Structure of the WIL component</b>			
Same as on institutional level			
<b>WIL quality cycle</b>			
Monitoring: frequency	Employers and students to be visited on a weekly basis.		
Assessment: frequency	Written assessments on a weekly or at least monthly basis.		
Debriefing: frequency	CUT debrief with employers on a monthly/quarterly basis.		
	Written reports on monthly or at least quarterly basis.		

Table 9.12: Department of Language and Social Sciences Education specific indicators

BEd programmes			
Economic and Management Sciences; Languages			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Same as faculty and institutional level.	Students to be allocated by CUT to employers based on CUT's knowledge of the students and employer.
Subject matter expertise	2,5/5		
Diligence	3,5/5		
Communication	3/5		
People skills	4/5		
Team work	3/5		

*Table 9.13: Department of Mathematics, Science and Technology Education specific indicators*

<b>BEd programmes</b>			
<b>Computer Science; Natural Sciences; Mathematics; Technology</b>			
<b>Skills bucket</b>		<b>Structure of WIL component</b>	<b>WIL quality cycle</b>
Attitude	3/5	Same as faculty and institutional level.	Students to be allocated by CUT to employers based on CUT's knowledge of the students and employer.
Subject matter expertise	2,5/5		
Diligence	3,5/5		
Communication	3/5		
People skills	4/5		
Team work	3/5		

*Table 9.14: Department of Postgraduate Studies in Education specific indicators*

<b>PGCE</b>			
<b>Skills bucket</b>		<b>Structure of WIL component</b>	<b>WIL quality cycle</b>
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the final year of study.	Students to be allocated by CUT to employers based on CUT's knowledge of the students and employer.
Subject matter expertise	3/5		
Diligence	3/5		
Communication	3/5		
People skills	3,5/5		
Team work	3/5		

### 9.3.4 Faculty of Management Sciences

The specific indicators for this faculty and programmes per department are indicated in the tables below.

Table 9.15: Faculty of Management Sciences specific indicators

Ideal bucket of skills and qualities required and assessment ratings			
CUT		Faculty	
Attitude	4/5	Attitude	4/5
Subject matter expertise	3/5	Subject matter expertise	3,5/5
Work ethics	3/5	Work ethics	4/5
Communication	3/5	Communication	4/5
People skills	4/5	People Skills	4/5
Professional behaviour	3,5/5	Professional behaviour	4/5
Structure of the WIL component			
Students should be placed for WIL for three (3) months during the second semester of the first year and for six (6) months during the second semester of the second and third year of study.			
WIL quality cycle			
Monitoring: frequency	Employers and students need to be visited on a semester basis.		
Assessment: frequency	A practical demonstration is required on a monthly or quarterly basis.		
	Assessment in the workplace by a CUT representative is required on quarterly or at least semester basis.		

Table 9.16: Department of Accounting and Auditing specific indicators

Financial Information Systems			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the first, second and third year of study.	Employers and students need to be visited on a monthly basis.
Subject matter expertise	3,5/5		
Work ethics	4/5		
Communication	4/5		
Punctuality	4/5		
Professional behaviour	4/5		

Table 9.17: Department of Hospitality Management specific indicators

Hospitality Management			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Same as faculty level.	Debriefing: A CUT debrief with employers need to occur on a semester basis.
Subject matter expertise	4/5		
Work ethics	4/5		
Communication	4/5		
Team work	4/5		
Professional behaviour	4/5		
Sport Management			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	4/5	Students should be placed for WIL for six (6) months during the second semester of the first, second and third year of study.	No differences could be determined from the faculty level indicators.
Subject matter expertise	4/5		
Work ethics	4/5		
Communication	3/5		
People skills	3/5		
Professional behaviour	3/5		

Table 9.18: Department of Business Management specific indicators

Marketing			
Skills bucket		Structure of WIL component	WIL quality cycle
Attitude	3/5	Students should be placed for WIL for three (3) months during the second semester of the first, second and third year of study.	Monitoring: communication via e-mail was regarded as equally important as a personal visit that is required on a monthly basis.
Subject matter expertise	2/5		
Work ethics	3/5		
Communication	2/5		
Leadership and Management	2/5		
Professional behaviour	3/5		

*Table 9.19: Department of Business Support Studies specific indicators*

<b>Office Management &amp; Technology</b>			
<b>Skills bucket</b>		<b>Structure of WIL component</b>	<b>WIL quality cycle</b>
Attitude	3/5	Students should be placed for WIL for three (3) months during the second semester of the second and third year of study.	No differences could be determined from the faculty level indicators.
Subject matter expertise	3/5		
Work ethics	5/5		
Communication	3,5/5		
People skills	4/5		
Professional behaviour	4/5		

*Table 9.20: Department of Tourism and Event Management specific indicators*

<b>Tourism Management</b>			
<b>Skills bucket</b>		<b>Structure of WIL component</b>	<b>WIL quality cycle</b>
Attitude	4/5	Students should be placed for WIL for three (3) months during the second semester of the second year and for six (6) months during the second semester of the third year of study.	Monitoring: communication via telephone was regarded as equally important as a personal visit that is required on a monthly basis.
Subject matter expertise	4/5		
Work ethics	4,5/5		
Punctuality	4/5		
People skills	4/5		
Leadership and management	4/5		

Before the analyses done in the empirical chapters are brought into context with the objectives of the study and literature reviews presented, it is necessary to summarise the main conclusions drawn from the analyses above.

## 9.4 CONCLUDING SUMMARY

The following conclusions were drawn based on the analyses done in Chapters 6-9:

- It has been demonstrated empirically that WIL does enhance the employability of CUT students.
- Knowledge of the work environment and expectations gained through the unique job experience that WIL provides enhance the personal development of students as well as additional knowledge and skills to be better prepared and equipped for the working world, which can be regarded as the specific ingredient about WIL that enhances employability.
- Employers prefer to appoint students who have completed WIL with them, as opposed to students who did not complete any WIL.
- The ideal WIL student can be described as a competent and committed student with a positive attitude who is well prepared for WIL.
- 50% of CUT students are employed at the employers where they were previously placed for WIL.
- Employers do have the capacity to accommodate more CUT students for WIL.
- The ideal bucket of skills and qualities students should possess when graduating from university to be appointed as an employee with an employer is attitude, subject matter expertise, work ethics, communication, people skills and professional behaviour.
- The ideal graduate student can be described as someone with a positive attitude and exemplary conduct, coupled with a good degree of subject matter expertise.
- CUT students are currently in a good, although not perfect, position in respect of their attainment of the requisite attitude, people skills and professional behaviour. However, their work ethics, communication and subject matter expertise need improvement.
- To get the most out of WIL, the qualifications should be structured in such a manner that students are placed for WIL for three (3) months during the second semester of the first, second and third year of study.

- Employers prefer to appoint WIL students rather than non-WIL students. This provides further confirmation of the empirically proven fact that WIL does enhance the employability of students. It can therefore also be deduced that CUT has taken the right decision to include WIL in all qualifications.
- WIL students are overwhelmingly preferred to non-WIL students, primarily because of their knowledge of the work environment and expectations as well as job experience, which provides employers with the time to assess and mould a person as a future employee.
- Employers have reasons for preferring students from one university to another as well as services they want rendered regarding WIL that will influence their choice of a university to align with. These reasons and services need to form part of the final strategy on institutional, faculty and programme levels.
- The WIL quality cycle contains specific indicators to optimise the contribution of WIL towards the employability of students on institutional, faculty and programme levels.
- It was possible to develop an institutional strategy framework template for WIL that will form the basis from which the final strategy will be developed.
- The enhanced understanding of course content by students that indicated three (3) domains of learning, namely practical application, implications of theory application and abstract conceptualisation. These can be added as a refinement to the academic benefits of WIL, as it relates to deeper learning, enriching students' understanding of the subject matter and moving students into a new realm of learning.

The institutional strategy framework template developed for WIL will be used to guide the drafting of a strategy to optimise the contribution of WIL towards the employability of students of CUT in the following final chapter.



## **CHAPTER 10**

# **CONCLUSIONS AND RECOMMENDATIONS**

### **10.1 INTRODUCTION**

In reflecting on this study, the literature reviews done and empirical analysis completed need to be brought into context with the rationale and objectives of the study in order to develop a strategy inclusive of all the relevant variables to optimise the contribution of WIL towards the employability of CUT students. The rationale and objectives of the study are therefore presented first, followed by summaries of the key and pertinent concepts and issues identified with regard to the literature reviews and empirical analysis before the final strategy is presented.

### **10.2 Rationale and objectives**

The literature studied indicated that the enhancement of the employability of students is an important aspect of WIL, but it also revealed a gap. Although the same benefits or set of skills derived from WIL were reported in some cases, different skills sets were also reported. It was therefore necessary to determine which aspects of WIL and competencies or skills developed through or benefits derived from WIL will enhance the employability of students optimally. CUT has also completed a process (STEPS) to redefine its learning programmes. A significant result is that all learning programmes will have a compulsory component of WIL in future as a means of creating a competitive advantage. The challenge therefore was to develop a strategy for WIL that would enhance the contribution thereof towards the employability of CUT students optimally.

In order to formulate a strategy for WIL the following objectives were set:

- To provide a theoretical perspective on WIL and its potential contribution towards employability.
- To provide a theoretical and practical perspective on innovative business strategies that can enhance the competitive position of an organisation.

- To provide a theoretical review of the application of WIL in higher education from an international perspective.
- To determine the benefits or skills developed through WIL related to employability quantitatively.
- To conduct a qualitative survey to determine stakeholders' views regarding a strategy to be developed for WIL towards optimising the employability of students.
- To develop a strategy that includes all relevant variables to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State.

The summaries of the key and pertinent concepts and issues identified with regard to the literature reviews and empirical analysis are presented per objective. In this manner, any additional concepts and issues can be identified or re-emphasised for inclusion in the strategy, which was not included in the initial strategy framework developed from the empirical analysis.

### **10.2.1 A theoretical perspective on WIL**

A common understanding of what employability is was established to know exactly what it is that WIL will be measured against. Employability was determined to be a mixture of elements, but it is essentially about those elements that make someone a useful and therefore desirable employee. WIL, in turn, was defined as a tripartite (employers, students and the university) curriculum strategy, which enhances the value of learning through the alignment and integration of academic learning with learning in the workplace.

WIL as pedagogy was determined to be dependent on a balanced and structured approach that includes all parties involved, encapsulated by an integrated curriculum approach that fosters the independence of the student to facilitate the transfer of learning. It has a sound grounding in learning theories, resulting in an effective pedagogy that leads to benefits for academic institutions, employers and students in

particular. These benefits, together with the pedagogy of WIL, provide the link between WIL and employability.

A question that arose from the literature review was what specifically about WIL enhanced the employability of students. The answer to this question was revealed in the empirical analysis, namely that it is knowledge of the work environment and expectations gained through the unique job experience that WIL provides that enhances the personal development of students as well as additional knowledge and skills to be better prepared and equipped for the working world.

### **10.2.2 A theoretical perspective on business strategies**

Although that strategy is clearly not a straightforward concept to define, it was determined to consist of the following key components, which lead to the adoption of a definition of strategy as:

- an understanding of where one is,
- a clear sense of where one wants to end up,
- an assessment of what stands in between, a decision about how to approach the challenge, and
- a detailed course of action to undertake.

It was also determined that the strategy to be developed will have to be cognisant of the potential of CUT's resources and capabilities as well as the possibility that it can be configured in such a way that an inimitable service can be delivered that is valued by its customers.

The differentiation strategy was selected as the most appropriate strategy for the study since it is called for when a product or service is to be provided with distinctive qualities that are valued by customers, to set one apart from the competition. The intention in this regard is to develop students in such a way through WIL that they will possess distinctive qualities valued by CUT customers that will set CUT apart from its competition.

Generic differentiation strategy contains strategies that are more specific, namely differentiation by product, service, personnel and image. It provides options for developing a strategy for the purpose of this study, as it can be argued that the intended strategy contains definite elements of both a product (the skills and qualities that students ought to possess to make them more employable) and a service (which CUT needs to provide to students and employers as the primary customers of WIL), which can be used to differentiate CUT from its competitors. It needs to be noted that personnel (staff) and image were identified as a strength and opportunity in the SWOT analysis, respectively on institutional level.

A sustained competitive advantage is not only about strategic choice, but also about the implementation of organisation structures and systems that facilitate the achievement of their strategic choices. Examples are provided below and in respect of the application of WIL in higher education from an international perspective. Competitive advantage is thus achieved from the entire system of activities where the whole matters more than any individual part in terms of the types of fit.

The University of Waterloo proclaimed cooperative education as one of the six foundational pillars of the university and in this manner connected the importance of cooperative education to the identity of the university. Similarly, the University of Cincinnati developed WIL to become an intrinsic part of the culture of the institution where it is accepted as a core academic value and the learning benefits offered by WIL are well understood on every level.

The reality seems to be what many authors have predicted, namely that the era of relatively high fees and globalisation have encouraged new providers to enter the higher education market with far-reaching consequences comparable with the red oceans depiction. Universities must therefore start to adopt strategies that are more sophisticated, such as improved employer partnerships and greater student employability to mitigate risk, and seize opportunities to position themselves. Students thus need to be equipped with the skills and competencies that make them more employable together with a service that CUT needs to provide to students and

employers that can be used to differentiate CUT from its competitors. The intention should therefore be to move towards blue oceans through differentiation to create a distinctiveness and uniqueness for CUT and its students through WIL.

### **10.2.3 A review of the application of WIL in higher education internationally**

Universities are continually exploring new ways to foster graduates who possess a broad range of personal, social and professional capabilities that is evident in the spread of WIL practices, which are gaining greater presence and propulsion within the higher education landscape. The aim is to close the gap between employer expectations of the skills graduates should possess on entry to the workforce and the skills that graduates do possess.

An opportunity is presented to universities to gain an advantage and create a demand through a major revamp of WIL by expanding WIL offerings embedded within its courses. CUT has therefore also taken the right decision in this regard to include WIL in all qualifications. Such a revamp should include the following:

- The implementation of appropriate policies and approaches on institutional level to inculcate WIL as part of the culture of CUT.
- A cultural shift towards the development of partnerships and a stakeholder approach based on relationships and a common understanding of the associated responsibilities and level of commitment required.
- The development of a WIL curriculum and pedagogy that are purposefully designed and constructively aligned to both mainstream university curricula and employer needs. Increased communication and feedback between universities, students, and employers about curriculum issues are necessary to enhance curriculum design and establish mechanisms for continuous quality improvement for future initiatives.
- Adequate resourcing, which implies that WIL has to be seen as an integral part of teaching and learning and community engagement that is appropriately resourced.

A key challenge in the coming years will be to ensure that the supply of WIL opportunities offered by employers is able to meet the demand from students, faculties and institutions while simultaneously providing high-quality learning experiences to students. To be able to meet this demand it will be necessary for universities to engage both current WIL employers and those who have never provided WIL. The following could be considered by universities to increase employer involvement in WIL:

- Increased flexibility towards WIL employers to adjust the length and timing of WIL opportunities to align WIL programmes with business cycle needs better.
- Simplifying processes for employers to recruit and select WIL students, assistance with administrative requirements, and more training and support for employers in respect of student supervision and assessment.
- Ensuring regular and open communication between universities and WIL employers before, during and after placement.

There is an increasing focus on the student as the nexus of integrating classroom and workplace learning. The required emphasis on students and the effective application of WIL can be achieved through the alignment of activities with the quality cycle for WIL that includes:

- Preparation of students and employers by the university;
- The placement process;
- Visitation and monitoring by the university in the workplace;
- Mentoring and assessment by employers; and
- Assessment and debriefing by the university.

In addition to what was established above, examples of various universities' applications of WIL also revealed the following:

- The inclusion of employability as a central issue as part of all programmes.

- WIL can be presented in a parallel, alternating or consecutive manner, adding to the flexibility of WIL.

#### **10.2.4 Quantitative analysis**

The following conclusions were drawn based on the analyses performed:

- The ideal bucket of skills and qualities that students should possess when graduating from university to be appointed as an employee with an employer is attitude, subject-matter expertise, work ethics, communication, people skills and professional behaviour.
- CUT students are currently in a good, although not perfect, position in respect of their attainment of the requisite attitude, people skills and professional behaviour. However, their work ethics, communication and subject matter expertise need improvement.
- The ideal graduate student can be described as someone with a positive attitude and exemplary conduct, coupled with a good degree of subject matter expertise.
- It was empirically proven that WIL does enhance the employability of CUT students. On average, two (2) CUT students were offered employment upon completion of WIL, compared to one (1) student employed who did not complete any WIL.
- Knowledge of the work environment and expectations gained through the unique job experience that WIL provides enhances the personal development of students and provides additional knowledge and skills to be better prepared and equipped for the working world can be regarded as the specific ingredient about WIL that enhances employability.
- Employers prefer to appoint WIL students rather than non-WIL students. This provides further confirmation of the empirically proven fact that WIL does enhance the employability of students. It can therefore also be deduced that CUT has taken the right decision to include WIL in all qualifications.

- WIL students are overwhelmingly preferred to non-WIL students, primarily because of knowledge of the work environment and expectations as well as job experience, which provides employers with the time to assess and mould a person as a future employee. 50% of CUT students are eventually employed by the employers where the students were placed for WIL.
- The ideal WIL student can be described as a competent and committed student with a positive attitude who is well prepared for WIL.
- To get the most out of WIL, qualifications should be structured in such a manner that students are placed for WIL for three (3) months during the second semester of the first, second and third year of study.
- The services employers want rendered to them are a relationship of trust and respect built through personal contact, complemented by professional and regular communication and support before, during and after the placement of thoroughly prepared students who meet the expectations and standards of employers.
- The competence and commitment of students as well as the quality of the relationship with personal contact provided by the university are the most important reasons why employers would select students from a specific university.
- The institutional strategy framework template developed for WIL will be used to draft a strategy inclusive of all relevant variables to optimise the contribution of WIL towards the employability of students of CUT.

### **10.2.5 Qualitative analysis**

A comparison of the views of lecturers and students is shown in Table 10.1.



*Table 10.1: Views of lecturers and students regarding the rationale for WIL*

<b>Rationale</b>	<b>Lecturers</b>	<b>Students</b>
Reasons for including WIL in qualifications	Preparation for work environment through authentic work experiences. Integrating theory with practice.	Preparation for work environment. Application of theory in the workplace. Enhance employability.
What students have learned from WIL	Application of theory. Workplace realities.	Application of theory. How to adapt to the demands of the workplace. People skills.
What is most valued about WIL	Students learning what the “real world” is about. Enhanced maturity of students.	Personal development. Additional knowledge and skills are developed.
The effect of WIL on students’ understanding of course content	Enhanced understanding of theory based on practical application thereof. Abstract terminology is better understood. Implications of the application of theory are understood.	Enhanced understanding of theory based on the application thereof.
Differences in students after WIL experience	More mature and responsible. Increased motivation.	Increased confidence. More mature.
Advice to students regarding WIL	Have a positive attitude and make the most of the opportunity.	Have a positive attitude and make the most of the opportunity. Display maturity. Act responsibly.

An integration of both views has revealed an interesting progression noticeable in students. Based on their consensus that WIL is included in qualifications to prepare students for the work environment through authentic work experiences, students have learned how to apply theory and adapt to the demands of the workplace. Learning what

the “real world” is about enabled them to develop personally and acquire additional knowledge and skills. This enabled them to demonstrate an enhanced understanding of theory based on the application thereof, which is inclusive of a better understanding of abstract terminology as well as the implications of the application of theory. They returned from their WIL experiences more mature and responsible, with increased levels of motivation and confidence. This provided the basis for the provision of mature advice to have a positive attitude and make the most of the opportunity whilst acting responsibly.

It can therefore be concluded that these views further substantiate the quantitative findings in terms of the necessity of WIL to enhance the employability of students. This conclusion is primarily based on the progression of students noticed above and the alignment thereof with the ideal graduate student profile in terms of attitude, conduct and subject matter expertise (enhanced understanding of theory and the application thereof).

#### **10.2.6 Additional concepts and issues identified and re-emphasised**

The following additional concepts and issues were identified that need to be added and/or taken cognisance of:

- Definitions of employability and WIL need to be added to provide a proper context to the strategy. They will be included in the final institutional strategy framework for WIL.
- The potential of CUT's resources and capabilities as well as the possibility that it can be configured in such a way that an inimitable service can be delivered, valued by its customers. The current structures and relevant committees of CUT will therefore have to be included as enablers for the implementation of the strategy.
- A sustained competitive advantage is not only about strategic choice, but also about the implementation of organisation structures and systems that facilitate the achievement of their strategic choices. A competitive advantage is thus

achieved from the entire system of activities where the whole matters more than any individual part in terms of the types of fit. This will be possible, should CUT accept and adopt the proposed strategy for WIL.

- The University of Waterloo and the University of Cincinnati are good examples of the value to be derived from integrating WIL into the culture of a university.
- The intention should be to move towards blue oceans through differentiation to create a distinctiveness and uniqueness for CUT and its students by means of WIL, which will be possible through implementation of the strategy.
- A major revamp of WIL entails the following:
  - A cultural shift towards the development of partnerships and a stakeholder approach based on relationships and a common understanding of the associated responsibilities and level of commitment required.
  - Increased communication and feedback between universities, students, and employers.
  - Adequate resourcing, which implies that WIL has to be seen as an integral part of teaching and learning and community engagement that is appropriately resourced.
  - All these issues are clear in the strategy.
- The inclusion of employability as a central issue, as part of all programmes, will have to be added in the final institutional strategy framework for WIL as an additional preparatory topic for students before they are placed for WIL.

### **10.3 STRATEGY**

Based on what was presented above, the following strategy is proposed to realise the main objective of the study:

# A STRATEGY TO OPTIMISE THE CONTRIBUTION OF WORK INTEGRATED LEARNING TOWARDS THE EMPLOYABILITY OF STUDENTS OF THE CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE

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### **10.3.1 Introduction**

The strategy provides for three levels of implementation, namely institutional, faculty and programme (departmental) level. Provision is firstly made for significant issues to bear in mind as well as general information to take note of with regard to the strategy. The strategy is then presented on an institutional level in accordance with the institutional strategy framework for WIL, followed by a refinement to faculty and programme (department) levels. The final institutional strategy framework for WIL is provided at the end for future reference and use.

### **10.3.2 Significant issues**

Significant issues to bear in mind regarding WIL and employability are the following:

- It has been demonstrated empirically that WIL does enhance the employability of CUT students.
- Employers prefer to appoint students who have completed WIL with them, as opposed to students who had not completed any WIL.
- 50% of CUT students are employed at the employers where the students were placed for WIL.

### **10.3.3 General information**

General information to note regarding employers as the consumers of products and services rendered regarding WIL is:

- WIL is considered an important issue for employers, given that more than two-thirds of decisions regarding WIL are taken at middle and top management levels, predominantly by staff with more than five years' experience in WIL.
- Most employers (53,19%) are small in scale (1-50 employees), with a significant percentage (34,05%) that can be classified as large (employee numbers in excess of 100).

- Although employers are predominantly located in the Free State Province, CUT has WIL employers in every province of South Africa.
- Employers do have the capacity to accommodate more CUT students for WIL.

#### **10.3.4 Basis**

An understanding is required of where CUT are and what one needs to know to use as the basis from which to formulate the strategy. This includes defining the main concepts, combining the views of all stakeholders in a SWOT analysis, knowing the reasons why employers accommodate students for WIL together with their preference biases for WIL students and knowing the type of services employers want rendered that will persuade them to participate with one university rather than another.

##### *10.3.4.1 Defining WIL and employability*

Employability is defined as a mixture of elements but is essentially about those elements that make someone a useful, and therefore, desirable employee.

WIL is defined as a tripartite (employers, students and the university) curriculum strategy that enhances the value of learning through the alignment and integration of academic learning with learning in the workplace.

##### *10.3.4.2 SWOT analysis*

The SWOT analysis below represents the views of employers, lecturers and students with regard to the strengths, weaknesses, opportunities and threats identified in respect of WIL at CUT.

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"><li>• Good relationships between CUT and employers to keep curricula relevant by staying in contact with various industries and real-world demands.</li><li>• The dedication of CUT staff in programmes</li></ul>	<ul style="list-style-type: none"><li>• Lack of personal contact with employers and students by lecturers during the monitoring of WIL.</li><li>• Coordination and time management of elaborate administrative WIL processes.</li></ul>

<p>actively involved with WIL and the quality of placements arranged by the WIL office driving it.</p> <ul style="list-style-type: none"> <li>• Providing well-prepared and more employable students for the future.</li> </ul>	<ul style="list-style-type: none"> <li>• Not enough employers for WIL.</li> <li>• The level of preparation of students for WIL and the calibre of students placed.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Build strong personal and strategic relationships with commerce, industry and the public sector to create more job opportunities through WIL.</li> <li>• Better-prepared and equipped students for the working world through close contact and feedback from employers.</li> <li>• Enhance the national and international image of students and CUT.</li> <li>• Entrepreneurship development through WIL.</li> </ul>	<ul style="list-style-type: none"> <li>• Competence levels and negative attitude of students.</li> <li>• Losing personal contact and feedback from employers, which could make curricula and the approval of employers for placement irrelevant.</li> <li>• Not matching students with employers' profiles and expectations with insufficient contact with students when they are placed for WIL.</li> <li>• The limited number of WIL opportunities in Bloemfontein and Welkom and competition from other universities.</li> </ul>

#### 10.3.4.3 *Reasons why employers accommodate students for WIL*

The main reasons motivating employers to accommodate students for WIL are the following:

- Social responsibility
- Provision of future staff for their relevant industry
- The use of WIL as a recruitment method
- Create a pool of applicants to use in the future

#### *10.3.4.4 Employers' preference biases for WIL students*

Employers have clearly indicated that they prefer WIL students to students who have not completed WIL (non-WIL students). Their preference for WIL students is based on the following:

- Students' knowledge of the work environment and expectations
- Students' practical job experience
- Employers have time to assess and mould a person as a future employee
- Better prepared and equipped for the working world

#### *10.3.4.5 Employers' reasons for preferring students from one university to another*

It was determined that employers are inclined to prefer students from one university to those from another university. The reasons why employers prefer students from one university are the following:

- The competence and commitment of students
- The quality of the relationship with the university
- Personal contact provided by the university

Employers want competent and committed students with a positive attitude who are well prepared for WIL.

#### **10.3.5 Objective**

A clear sense is required of where one wants to end as the main objective to be achieved with the strategy. The objective of this strategy is:

- To optimise the contribution of WIL towards the employability of CUT students



### 10.3.6 Assess

An assessment of what stands between CUT and achieving the objective has revealed two (2) main issues that need to be addressed, namely that which specifically enhances the employability of students and the ideal bucket of skills and qualities required by employers to appoint students in their organisations upon graduation.

#### *10.3.6.1 What specifically about WIL enhances employability?*

The specific ingredient of WIL that enhances the employability of students can be described as:

Knowledge of the work environment and expectations gained through the unique job experience that WIL provides enhances the personal development of students as well as additional knowledge and skills to be better prepared and equipped for the working world.

#### *10.3.6.2 The ideal bucket of skills and qualities required and assessment ratings*

The ideal bucket of skills and qualities required by employers to appoint students in their organisations upon graduation and current assessment ratings of employers of CUT students in respect thereof are the following (on a 5-point scale):

- Attitude (4/5)
- Subject matter expertise (3/5)
- Work ethics (3/5)
- Communication (3/5)
- People skills (4/5)
- Professional behaviour (3,5/5)

These ratings indicate that CUT students are in a good, although not perfect, position regarding their attitude, people skills and professional behaviour. Hence, their work ethics, communication and subject matter expertise need improvement. As a whole

there seems to be no cause for alarm in meeting the ideal student's profile, but there is room for improvement. It is also important to note how these ratings vary when the strategy is refined to faculty and programme levels.

A graduate student with a positive attitude and exemplary conduct coupled with a good degree of subject matter expertise is therefore what employers are looking for.

### **10.3.7 Enablers**

The decision how to approach the challenge to optimise the contribution of WIL towards the employability of CUT students is based on what one can use as enablers to facilitate the achievement of the objective. The investigation conducted revealed that

- the WIL component in qualifications needs to have a specific structure to get the most out of WIL;
- there are various methods to follow to include the ideal bucket of skills and qualities required in the curriculum;
- employers want specific services rendered to them that needs to be utilised in this respect; and
- CUT's structures and committees need to be configured in such a way that an inimitable service valued by its customers can be delivered.

#### *10.3.7.1 The structure of the WIL component in qualifications*

The structure proposed is that students should be placed for WIL for three (3) months during the second semester of the first, second and third year of study. Modifications to this structure needs to take place on faculty and programme levels where relevant.

#### *10.3.7.2 Methods for including the skills and qualities in the curriculum*

The methods below are an indication of what can be selected by faculties and programmes as the most appropriate methods identified for including the relevant skills and qualities required in the curriculum.

- Module

- Project
- Simulation
- Case study
- Simulation and case study
- Module, simulation, project and case study
- Simulation and project

#### *10.3.7.3 The services required by employers*

The services identified that employers want rendered that will influence their choice of which university to partner with in respect of WIL are the following:

- A relationship of trust and respect built through personal contact
- Professional and regular communication and support before and during the placement period
- Thoroughly prepared students that meet the expectations and standards of employers

#### *10.3.7.4 CUT structures and committees*

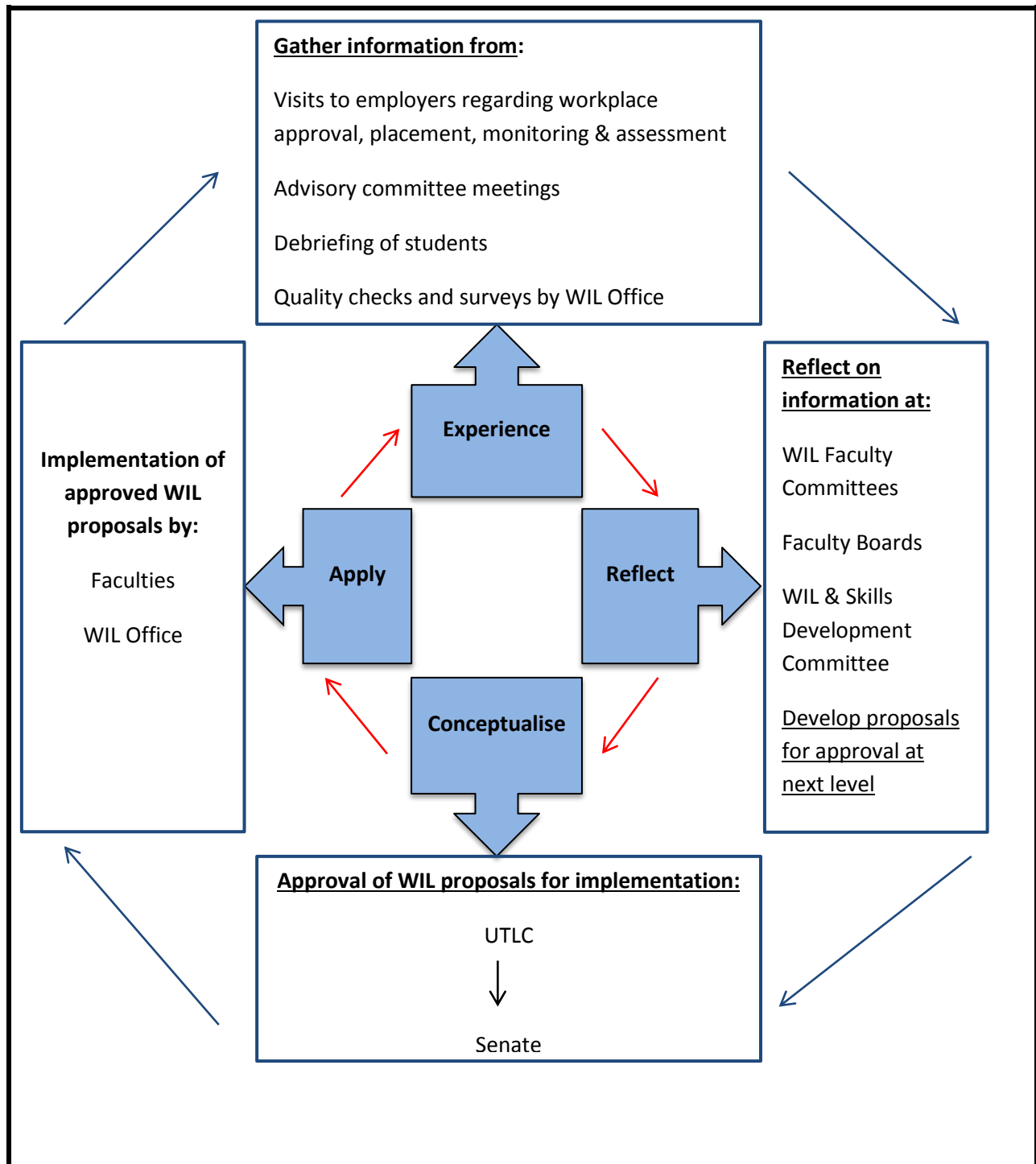
CUT's structures and committees need to be configured in such a way that an inimitable service valued by its customers can be delivered. The configuration in Diagram 10.1 below is proposed to achieve this goal. The proposed configuration makes provision for the alignment of CUT structures, committees and activities with Kolb's EL cycle (Passarelli & Kolb 2012:4) to ensure that such structures, committees and activities are based on an existing and effective pedagogy, which enables the encapsulation of the essence of the strategy and enculturation of WIL at CUT.

The gathering, collation and reflection on information for future implementation are of vital importance for continuous improvement and an uninterrupted flow of the cycle of activities proposed. The information required is the following:

- Employers' satisfaction regarding each individual component of the WIL quality cycle and satisfaction with services rendered need to be gathered on a quarterly basis by:
  - the WIL office during visits to employers regarding workplace approvals and the placement of students. In addition, the WIL office needs to draft an annual report inclusive of information from additional quality checks completed with employers, students and lecturers.
  - WIL lecturers in faculties during monitoring and assessment visits to employers.
- Feedback obtained from employers during advisory committee meetings and feedback from students gathered during debriefing sessions need to be collated by the WIL lecturers in faculties.

All the information gathered must be reflected on at the quarterly meetings of the WIL faculty committees, faculty boards and at the WIL & Skills Development Committee. Proposals must be developed at these meetings and presented for conceptual applicability, discussion and approval at the University Teaching and Learning Committee (UTLC) on a semester basis. Proposals approved in concept need to be submitted by the UTLC to Senate for final approval and implementation by the faculties and WIL office.

Diagram 10.1: Configuration of CUT structures and committees



### 10.3.8 Details

A detailed course of action is about the specifics that one needs to pay attention to. The details of what needs to happen are provided in terms of each individual component of the WIL quality cycle.

#### 10.3.8.1 WIL quality cycle

To enhance the employability of students optimally, the following activities are recommended in respect of each component of the WIL quality cycle:

Preparation of students	<u>Topics to include:</u> <ul style="list-style-type: none"> <li>• Work ethics</li> <li>• Professional behaviour</li> <li>• Attitude</li> <li>• Responsibility</li> <li>• Expectations from the workplace</li> <li>• Communication</li> <li>• Employability</li> </ul>
Preparation of employers	<u>What to address:</u> <ul style="list-style-type: none"> <li>• Clarification of the expectations of CUT, students and employers (with training provided to employers where necessary).</li> <li>• Regular communication, which needs to start well in advance of the commencement of the placement period.</li> <li>• The provision of clear written outcomes to be achieved.</li> <li>• Establish a relationship of trust through regular personal contact.</li> <li>• Match students with the needs of employers.</li> <li>• An on-site assessment of the capabilities and suitability of employers.</li> </ul>
Placement process	<u>Done by:</u> <ul style="list-style-type: none"> <li>• One representative from CUT.</li> </ul>

	<ul style="list-style-type: none"> <li>Students approaching employers on their own for placement should be avoided.</li> </ul> <p><u>How to introduce students:</u></p> <ul style="list-style-type: none"> <li>A CV, cover letter and interview, together with a recommendation from CUT are the preferred method to introduce students for placement to employers.</li> <li>In the absence of CVs and interviews, students can also be allocated by CUT to employers based on CUT's knowledge of the students and employer.</li> <li>Volunteer work or job shadowing at employers during holidays.</li> </ul>
Monitoring by CUT	<p><u>Preferred methods:</u></p> <ul style="list-style-type: none"> <li>A personal visit by a representative from CUT is confirmed to be the most important monitoring method.</li> </ul> <p><u>Frequency:</u></p> <ul style="list-style-type: none"> <li>Employers and students need to be visited on at least a quarterly or semester basis.</li> </ul>
Mentorship and supervision	<p><u>How:</u></p> <ul style="list-style-type: none"> <li>Combining mentorship and supervision is the preferred method.</li> </ul> <p><u>Enhanced by:</u></p> <ul style="list-style-type: none"> <li>Providing employers with guidelines and templates to complete to ensure objectivity and consistency.</li> </ul>
Assessment	<p><u>Preferred methods:</u></p> <ul style="list-style-type: none"> <li>Practical demonstration</li> <li>Assessment in workplace by a CUT representative</li> <li>Written assessment</li> <li>Reflection journal/reports by students</li> </ul> <p><u>Frequency:</u></p> <ul style="list-style-type: none"> <li>Practical demonstration             <ul style="list-style-type: none"> <li>Weekly/monthly</li> </ul> </li> <li>Assessment in workplace by CUT representative</li> </ul>

	<ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> <li>• Written assessment <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> <li>• Reflection journal/reports by students <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> </ul>
Debriefing	<p><u>Preferred methods:</u></p> <ul style="list-style-type: none"> <li>• Student debrief with CUT</li> <li>• Student debrief with employer</li> <li>• CUT debrief with employer</li> <li>• Written report</li> </ul> <p><u>Frequency:</u></p> <ul style="list-style-type: none"> <li>• Student debrief with CUT <ul style="list-style-type: none"> <li>○ Monthly/quarterly</li> </ul> </li> <li>• Student debrief with employer <ul style="list-style-type: none"> <li>○ Monthly</li> </ul> </li> <li>• CUT debrief with employer <ul style="list-style-type: none"> <li>○ Quarterly</li> </ul> </li> <li>• Written report <ul style="list-style-type: none"> <li>○ Quarterly</li> </ul> </li> </ul>

### 10.3.9 Faculties and programmes

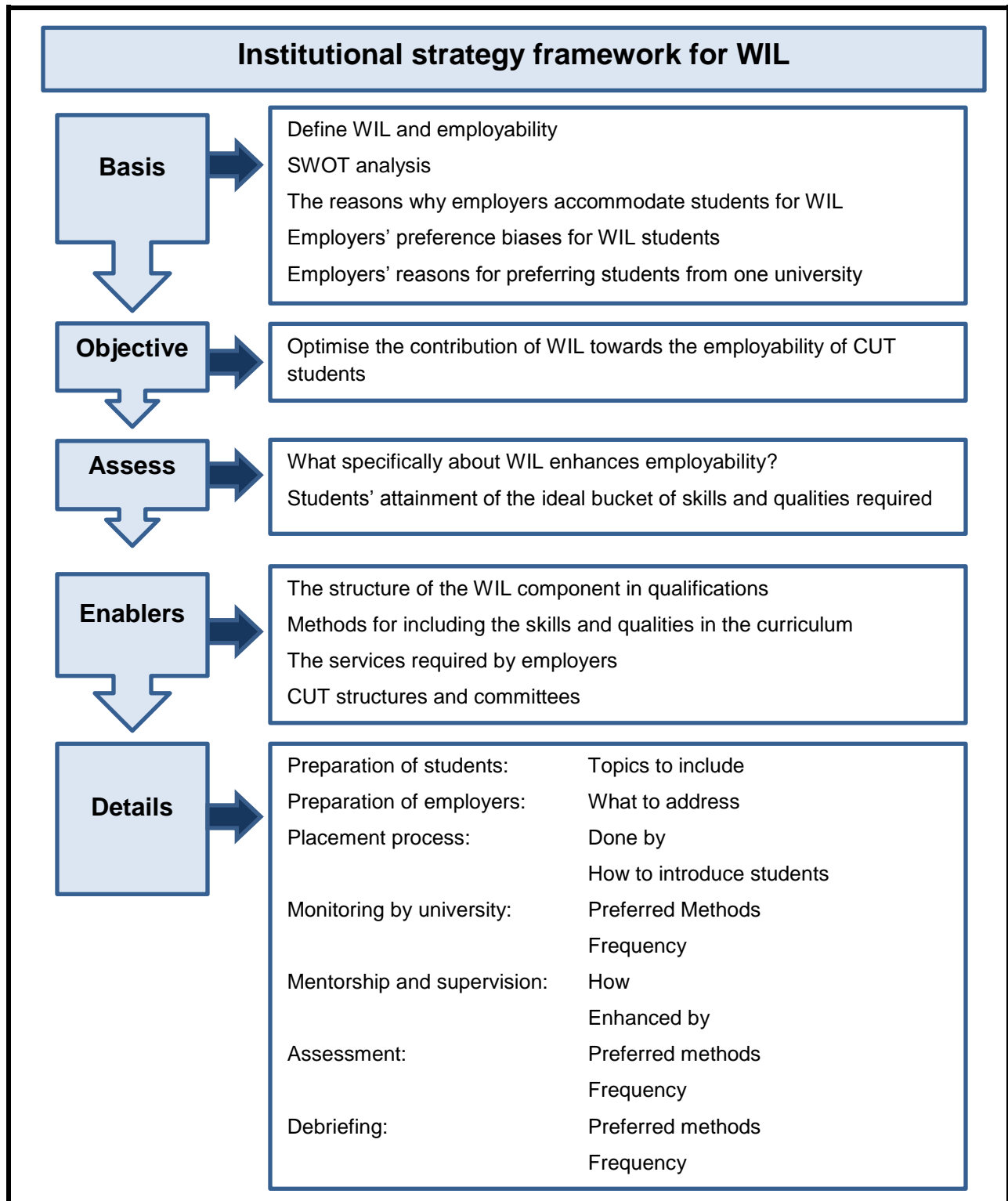
The institutional strategy has already been refined to faculty and programme levels in chapter 9 and should be regarded as an annexure to the final strategy to avoid duplication.

### 10.3.10 Final institutional strategy framework for WIL

The additional concepts and issues identified in this chapter for inclusion in the strategy can now be added to the institutional strategy framework (Diagram 9.1) presented in Chapter 9. The final institutional strategy framework for WIL is presented in Diagram 10.2 below.



Diagram 10.2: Final institutional strategy framework template for WIL



The final institutional strategy framework together with the faculty and programme analyses presented in chapter 9 as well as the conceptualisation of CUT structures and committees (diagram 10.1) represent the overall conceptual framework of the study.

## **10.4 SUMMARY**

The main objective and research question were aimed at how to formulate a strategy to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State. Both the main objective and research question were achieved and answered through the development and presentation of a strategy to optimise the contribution of WIL towards the employability of students of the Central University of Technology, Free State.

It is recommended that the strategy be presented for approval and adoption by the Central University of Technology, Free State to optimise the contribution of WIL towards the employability of CUT students. It can also be argued that this study can serve as an assessment of the current level of skills and qualities attained by CUT students in relation to what is required by employers. It is also recommended that this strategy be used by faculties and programmes to guide the application of WIL in the development of current and new programmes.

By means of this study it was also possible to identify what specifically about WIL enhances employability, namely the knowledge of the work environment and expectations gained through the unique job experience WIL provides that enhances the personal development of students as well as additional knowledge and skills to be better prepared and equipped for the working world.

## **10.5 IMPLICATIONS FOR FUTURE RESEARCH**

Since this study was done on an institutional level with a limited number of employers selected per qualification, it is recommended that more detailed studies are conducted per qualification which are representative of a larger number of employers, lecturers and students per qualification.

## **10.6 LIMITATIONS OF THE STUDY**

The study was limited to a sample of active employers used for WIL at CUT during the period of 2011–2014. Due to the qualitative nature of the investigation regarding lecturers and students, the samples in this respect are much smaller than the sample of the quantitative investigation used for employers.

## REFERENCES

- Abeysekera, I. 2006. Issues relating to designing a work-integrated learning program in an undergraduate accounting degree program and its implications for the curriculum. *Asia-Pacific Journal of Cooperative Education* 7(1):7-15.
- Acquaah, M. and Yasai-Ardekani, M. 2008. Does the implementation of a combination competitive strategy yield incremental performance benefits? A new perspective from a transition economy in Sub-Saharan Africa. *Journal of Business Research* (61)4:346–354.
- African Development Bank Group. 2008. Strategy for Higher Education, Science and Technology. (<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/10000019-EN-STRATEGY-FOR-HIGHER-EDUCATION-SCIENCE-AND-TECHNOLOGY.PDF>) Retrieved on 28 November 2013.
- Agnes, M. (Ed). 2000. *Webster's new world college dictionary*. 4<sup>th</sup> ed. Foster City, CA: IDG Books Worldwide.
- Agrawal, T. 2013. Vocational education and training programs (VET): An Asian perspective. *Asia-Pacific Journal of Cooperative Education* 14(1):15-26.
- Albers-Miller, N.D. 2014. Image differentiation. (<http://facultyweb.berry.edu/nmiller/classinfo/601/Module%204/imagedifferentiation.htm>) Retrieved on 14 March 2014.
- Allio, R.J. and Randall, R.M. 2010. Kiechel's history of corporate strategy. *Strategy & Leadership* 38(3):29-34.
- Allison, J. 2013. Business strategy: The three generic strategies. (<http://drjerryallison.hubpages.com/hub/Business-Strategy-The-Three-Generic-Strategies>) Retrieved on 25 August 2013.

- Al-Qatamin, A.A. and Al-Qatamin, A.A. 2012. An evaluation of corporate strategic performance: An evidence from Jordan. *Australian Journal of Business and Management Research* (2)1:9-15.
- Ankli, R.E. 1992. Michael Porter's competitive advantage and business history. *Business and Economic History* (21)2:228-236.
- Arauz, M. 2014. What is strategy? (<https://medium.com/on-management/what-is-strategy-79d9a039f5dc>) Retrieved on 7 April 2014.
- Armstrong, G., McMahon-Beattie, U. and Greenan, K. 2006. Work-based learning in the University of Ulster: Embedding employability in business studies. ([http://www.heacademy.ac.uk/assets/bmaf/documents/Resources/Employability\\_case\\_studies/Employability\\_Gillian\\_Armstrong.pdf](http://www.heacademy.ac.uk/assets/bmaf/documents/Resources/Employability_case_studies/Employability_Gillian_Armstrong.pdf)) Retrieved on 14 January 2013.
- Arora, H. 2009. A conceptual study of brand communities. *The Icfai University Journal of Brand Management* VI(2):7-21.
- Averill, J.B. 2002. Matrix analysis as a complementary analytic strategy in qualitative inquiry. *Qualitative Health Research*. 12(6):855-866.
- Aykan, E. and Aksoylu, S. 2013. Effects of competitive strategies and strategic management accounting techniques on perceived performance of businesses. *Australian Journal of Business and Management Research* (3)7:30-39.
- Baden-Fuller, C and Morgan, M.S. 2010. Business models as models. *Long Range Planning* (43)1:156-171.
- Baird, C. 2012. Why is there so much disagreement about what strategy is? ([http://www.academia.edu/2980379/Why\\_is\\_there\\_so\\_much\\_disagreement\\_about\\_what\\_strategy\\_is](http://www.academia.edu/2980379/Why_is_there_so_much_disagreement_about_what_strategy_is)) Retrieved on 23 February 2014.

- Baroto, M.B., Abdullah, M.M.B.A. and Wan, H.L. 2012. Hybrid strategy: a new strategy for competitive advantage. *International Journal of Business and Management* (7)20:120-133.
- Barrows, E. 2014. What is strategy execution? (<http://www.amanet.org/training/articles/What-Is-Strategy-Execution.aspx>) Retrieved on 2 April 2014.
- Barua, A. 2013. Methods for decision-making in survey questionnaires based on Likert Scale. *Journal of Asian Scientific Research* 3(1):35-38.
- Bates, M. 2008. Work-integrated curricula in university programs. ([http://www98.griffith.edu.au/dspace/bitstream/handle/10072/22983/52961\\_1.pdf?sequence=1&origin=publication\\_detail](http://www98.griffith.edu.au/dspace/bitstream/handle/10072/22983/52961_1.pdf?sequence=1&origin=publication_detail)) Retrieved on 3 February 2014.
- Bates, A. and Bates, L. 2013. WIL: Essential for work in child protection? *Asia-Pacific Journal of Cooperative Education* 14(1):45-58.
- Bates, M., Thompson, C. and Bates, L. 2013. Not all dimensions of work self-efficacy are equal: Understanding the role of tertiary work placements in the development of the elements of work self-efficacy. *Journal of Cooperative Education and Internships* 47(1):19-30.
- Baxter, J. and Burden, P. 2008. Examining fitness for purpose of undergraduate curricula in preparing students for work-integrated learning placements. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice... Pedagogy... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008. Sydney University of Technology, Sydney.)
- Baykal, J. and Delagarde, M. 2011. Differentiation strategies in the fashion industry. (<http://www.diva-portal.org/smash/get/diva2:427555/FULLTEXT02.pdf>) Retrieved on 3 March 2014.

- Beeth, M.E. and Adadan, E. 2006. The influences of university-based coursework on field experience. *Journal of Science Teacher Education* 17(2):103-120.
- Ben-Amar, W., Boujenoui, A. and Zéghal, D. 2014. The relationship between corporate strategy and enterprise risk management: Evidence from Canada. *Journal of Management and Strategy* (5)1:1-17)
- Bender, C.J.G., Daniels, P., Lazarus, J., Naude, L. and Sattar, K. 2006. *Service-learning in the curriculum: a resource for higher education institutions*. Pretoria: Council on Higher Education and JET/CHESP.
- Betts, K., Lewis, M. Dressler, A. and Svensson, L. 2009. Optimizing learning simulation to support a quinary career development model. *Asia-Pacific Journal of Cooperative Education* 10(2):99-119.
- Biggs, J. and Tang, C. 2007. *Teaching for quality learning at university*. Berkshire: Society for Research into Higher Education & Open University Press.
- Billett, S. 2011. Curriculum and pedagogic bases for effectively integrating practice-based experiences. (<http://www.acen.edu.au/resources/docs/Billett-S-Griffith-NTF-Final-report-2011.pdf>) Retrieved on 20 June 2014.
- Bologna Process. 2007. European higher education in a global setting. A strategy for the external dimension of the Bologna Process. (<http://www.ehea.info/Uploads/Global%20context/Strategy-for-EHEA-in-global-setting.pdf>) Retrieved on 4 May 2014.
- Bologna Process. 2010. Employability. (<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/actionlines/employability.htm>) Retrieved on 2 February 2014.
- Boonpattarakan, A. 2012. Model of Thai small and medium sized enterprises' organizational capabilities: Review and verification. *Journal of Management Research* (4)3:15-42.

- Bordes, J. 2009. Building and sustaining competitive advantage. (<http://www.aiu.edu/applications/DocumentLibraryManager/upload/Jeff%20Bordes.Strategic%20Management.pdf>) Retrieved on 23 March 2014.
- Boston University. 2013. When to use a nonparametric test. ([http://sphweb.bumc.bu.edu/otlt/MPH-Modules/BS/BS704\\_Nonparametric/BS704\\_Nonparametric2.html](http://sphweb.bumc.bu.edu/otlt/MPH-Modules/BS/BS704_Nonparametric/BS704_Nonparametric2.html)) Retrieved on 8 August 2014.
- Boud, D. and Falchikov, N. 2006. Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education* 31(4):399-413.
- Brewer, D.J., Gates, S.M. and Goldman, C.A. 2001. In pursuit of prestige: Strategy and competition in U.S. higher education. (<http://www.rand.org/pubs/drafts/DRU2541.html>) Retrieved on 10 May 2014.
- Brigham Young University. 2014. Formulating strategy. (<http://training.byu.edu/documents/t-strategy.pdf>) Retrieved on 2 April 2014.
- Brodie, P. and Irving, K. 2007. Assessment in work-based learning: investigating a pedagogical approach to enhance student learning. *Assessment & Evaluation in Higher Education*. 32(1):11-19.
- Bronhorst, J.V. 2007. Work-integrated learning in the further education and training sector. (Unpublished DEd thesis.) Cape Peninsula University of Technology, Cape Town.
- Burke, L., Marks-Maran, D. J., Ooms, A., Webb, M. and Cooper, D. 2009. Towards a pedagogy of work-based learning: Perceptions of work-based learning in foundation degrees. *Journal of Vocational Education & Training* 61(1):15-33.
- Burkus, D. 2013. Three things strategy is not. (<http://ldrlb.co/2013/07/three-things-strategy-is-not/>) Retrieved on 5 April 2014.



- Butcher, V., Smith, J., Kettle, J. and Burton, L. 2011. *Review of good practice in employability and enterprise development by Centres for Excellence in Teaching and Learning: Summary report*. London: HEFCE.
- Businessdictionary.com. 2013. Strategy. (<http://www.businessdictionary.com/definition/strategy.html>) Retrieved on 18 July 2013.
- Calandro, J. 2010. Henry Singleton: A pioneer of corporate strategic leadership and value creation. *Strategy & Leadership* (38)6:29-37.
- Cambridge Dictionaries Online. 2014. Employability. (<http://dictionary.cambridge.org/dictionary/business-english/employability>) Retrieved on 2 February 2014.
- Cameron, G. 2013. The vulnerable worker? A labor law challenge for WIL and work experience. *Asia-Pacific Journal of Cooperative Education* 14(3):135-146.
- Canadian Association for Cooperative Education. 2005. Co-operative education manual: A guide to planning and implementing co-operative education programs in post-secondary institutions. (<http://www.cafce.ca/Library/documents/coopmanual.pdf>) Retrieved on 23 January 2014.
- Cannan, J. 2008. Practice based learning: exploring current models used for real world learning at a “dual sector tertiary institution”. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: “Work Integrated Learning: Transforming Futures – Practice... Pedagogy... Partnerships” held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008. Sydney University of Technology, Sydney.)
- Cara, C. 2008. I see ...I hear... I do ... and I understand: building competence, confidence and pedagogical capacity through collaborative partnership. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: “Work Integrated Learning: Transforming Futures – Practice... Pedagogy... Partnerships” held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008. Sydney University of Technology, Sydney.)

- Carriger, M. 2011. Narrative approach to corporate strategy: Empirical foundations. *Journal of Strategy and Management* (4)4:304-324.
- Cedercreutz, K. and Cates, C. 2010. Cooperative education at the University of Cincinnati: A strategic asset in evolution. *Peer Review* (12)4:20-23.
- Center for Research on Learning and Teaching. 2014. Learning Theories. (<http://www.crlt.umich.edu/tstrategies/tslt>) Retrieved on 10 January 2014.
- Central University of Technology, Free State. 2010. Vision 2020. (<http://www.cut.ac.za/vision-2020-2/>) Retrieved on 25 May 2015.
- Christensen, J.F. 1995. Asset profiles for technological innovation. *Research Policy* (24)5:727-745.
- Choy, S.C. and Delahaye, B.L. 2009. University-industry partnership for pedagogy: some principles for practice. (<http://www.waceinc.org/papers/vancouver/Australia/Choy,%20Delahaye.pdf>) Retrieved on 5 June 2013.
- Churton, C. and Tanaka, Y. 2008. Minding the gap between Japanese cooperative education and internships abroad – the value of cooperative project based learning. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: “Work Integrated Learning: Transforming Futures – Practice... Pedagogy... Partnerships” held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008. Sydney University of Technology, Sydney.)
- Cohen, L., Manion, L. and Morrison, K. 2007. *Research methods in education*. New York: Routledge.
- Coll, R.K. and Eames, C. (Eds). 2004. *International handbook for cooperative education*. Boston: World Association for Cooperative Education.
- Coll, R.K. and Eames, C. 2007. Learning science and technology through Cooperative Education. *Asia-Pacific Journal of Cooperative Education* 8(2):131-147.

- Costley, C. 2007. Work-based learning: assessment and evaluation in higher education. *Assessment and Evaluation in Higher Education* 32(1):1-9.
- Creswell, J. 2005. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: Prentice Hall.
- Croasmun, J.T. and Ostrom, L. 2011. Using Likert-Type scales in the social sciences. *Journal of Adult Education* 40(1):19-22.
- Crossman, A. 2013. Descriptive vs. Inferential Statistics. (<http://sociology.about.com/od/Statistics/a/Descriptive-inferential-statistics.htm>) Retrieved on 12 February 2013.
- Crump, S. 2008. Work, education and knowledge: a case study of educational partnerships and pathways. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice... Pedagogy... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008. Sydney University of Technology, Sydney.)
- CTM Standing Committee 2000. *Best practice in co-operative education*. Technikon SA: Florida.
- Cullen, M. 2008. Factors associated with learning outcomes from cooperative education in environmental science. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice ... Pedagogy ... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008.)
- Dåderman, A.M., Ronthy, M., Ekegren, M. & Mårdberg, B. 2013. "Managing with my heart, brain and soul": The development of the leadership intelligence questionnaire. *Journal of Cooperative Education & Internships* (47)1:61-79.
- Darden School of Business. 2014. Analysis of business strategy. (<http://faculty.darden.virginia.edu/bourgeoisj/files/chapter%205.html>) Retrieved on 2 February 2014.

- Department for Employment and Learning. 2012. Graduating to success: A higher education strategy for Northern Ireland. (<http://www.delni.gov.uk/hestrategy>) Retrieved on 30 March 2014.
- Dembe, A.E., Partridge, J.S. and Geist, L.C. 2011. Statistical software applications used in health services research: analysis of published studies in the U.S. (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3205033/>) Retrieved on 24 May 2014.
- Devins, D. 2013. Work based learning as integrated curriculum: A framework for good practice. (<http://www.wblic.org.uk/>) Retrieved on 4 June 2014.
- DeWolf, D. 2014. Why strategy's so important. (<http://daviddewolf.com/strategys-important/>) Retrieved on 5 May 2014.
- Dias, A.U.d.S.P. and Rodriques, L.L. 2010. Quality: The cost of a competitive strategy enabling a price. *Interdisciplinary Studies Journal* (1)1:16-26.
- Dickson, P.R. and Ginter, J.L. 1987. Market segmentation, product differentiation and marketing strategy. *Journal of Marketing* 51(1):1-10.
- Downey, J., Kalbfleisch, J.G. and Truman, R.D. 2002. Co-operative education: Greater benefits and greater costs. (<http://www.watcace.uwaterloo.ca/CostBenefitCo-opStudyFinal.pdf>) Retrieved on 20 March 2012.
- Drysdale, M.T.B. and McBeath, M. 2012. Self-concept and tacit knowledge: Differences between cooperative and non-cooperative education students. *Asia-Pacific Journal of Cooperative Education* 13(3):169-180.
- Drysdale, M.T.B. and McBeath, M. 2014. Exploring hope, self-efficacy, procrastination, and study skills between cooperative and non-cooperative education students. *Asia-Pacific Journal of Cooperative Education* 15(1):69-79.
- DJS Research Ltd. 2009. What is qualitative research? (<http://www.djsresearch.com/qualitativeresearch.html>) Retrieved on 9 September 2012.

- Dressler, S. and Keeling, A.E. 2011. Benefits of co-operative and work-integrated education for students. In Coll, R.K. and Zegwaard, K.E. (Eds.). *International handbook for cooperative and work-integrated education*. 2<sup>nd</sup> ed. Lowell: World Association for Cooperative Education. pp. 261-276.
- Du Plooy, G.S. 2007. A conceptual model for the quality management of the implementation of work integrated learning at a university of technology. (Unpublished PhD thesis.) North-West University, Vanderbijlpark.
- Eames, C. and Bell, B. 2005. Using sociocultural views of learning to investigate the enculturation of students into the scientific community through work placements. *Canadian Journal of Science, Mathematics and Technology Education* 5(1):153-169.
- Edgar, S. and Connaughton, J. 2014. Exploring the role and skill set of physiotherapy clinical educators in work-integrated learning. *Asia-Pacific Journal of Cooperative Education* 15(1):29-36.
- Ehmke, C. 2010. Strategies for competitive advantage. (<http://ag.arizona.edu/arec/wemc/nichemarkets/05competitiveadvantage.pdf>) Retrieved on 25 August 2013.
- El-Kadi, O. 2008. Strategy definition & fundamentals. (<http://www.easy-strategy.com/strategy-definition.html>) Retrieved on 7 May 2014.
- Engelbrecht, L.V. 2003. *Best practice of co-operative education*. NRF Project 15/1/5/2/000 44. NRF: Pretoria.
- Engel-Hills, P., Garraway, J., Jacobs, C., Volbrecht, T. and Winberg, C. 2010. Working for a degree: work-integrated learning in the higher education qualifications framework. In Townsend R (ed). *Kagisano no. 7 Universities of Technology – Deepening the Debate*. Council on Higher Education: Pretoria.
- Ereaut, G. 2007. *What is qualitative research?* (<http://www.qsrinternational.com/what-is-qualitative-research.aspx>.) Retrieved on 6 July 2011.

- Explorable. 2015. Types of Survey Questions. (<https://explorable.com/types-of-survey-questions>) Retrieved on 26 April 2015.
- Favaro, K. 2012. Strategy: An Executive's Definition. (<http://www.strategy-business.com/article/cs00002?gko=d59c2>) Retrieved on 12 May 2014.
- Fenton, A. 2013. Using a strengths approach to early childhood teacher preparation in child protection using work-integrated education. *Asia-Pacific Journal of Cooperative Education* 14(3):157-169.
- Fernandez, M.T. 2011. Business strategy model. *International Journal of Innovation, Management and Technology* (2)4:301-308.
- Ferns, S. and Moore, K. 2012. Assessing student outcomes in fieldwork placements: An overview of current practice. *Asia-Pacific Journal of Cooperative Education* 13(4):207-224.
- Fleming, J. and Hickey, K. 2013. Exploring cooperative education partnerships: A case study in sport tertiary education. *Asia-Pacific Journal of Cooperative Education* 14(3):209-221.
- Fleming, J., Martin, A.J., Hughes, H. and Zinn, C. 2009. Maximizing work integrated learning experiences through identifying graduate competencies for employability: a case study of sport studies in higher education. *Asia-Pacific Journal of Cooperative Education* 10(3):189-201.
- Fleming, J., Zinn, C. and Ferkins, L. 2008. Bridging the gap: competencies students should focus on during their cooperative experience to enhance employability. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice ... Pedagogy ... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008.)

- Forbes, B.E. 2008. *Work integrated learning: Quality, capacity and curriculum*. A PowerPoint presentation delivered at the SASCE Colloquium and Workshop on 15 September 2008 at the University of Johannesburg, South Africa.
- Formisano, R.A. 2004. *Manager's guide to strategy*. Madison: CWL Publishing Enterprises, Inc.
- Franz, J. 2008. A pedagogical model of higher education/industry engagement for enhancing employability and professional practice. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice ... Pedagogy ... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008.)
- Freudenberg, B., Brimble, M. and Cameron, C. 2008. It's all about 'I': Implementing 'integration' into a WIL program. (Paper presented at the WACE Asia Pacific Conference on Work Integrated Learning: "Work Integrated Learning: Transforming Futures – Practice ... Pedagogy ... Partnerships" held at the Manly Pacific Hotel in Sydney Australia from 30 September to 3 October 2008.)
- Freudenberg, B., Brimble, M. and Vyvyan, V. 2010. The penny drops: Can work integrated learning improve students' learning? *e-Journal of Business Education & Scholarship of Teaching* 4(1):42-61.
- Gallagher, S. 2008. Business level strategies. (<http://educ.imu.edu/~gallagsr/WDFPD-Business.pdf>) Retrieved on 2 March 2014.
- Gallagher, S. 2013. Corporate strategy. (<http://educ.imu.edu/~gallagsr/WDFPD-Corporate.pdf>) Retrieved on 2 February 2014.
- Gardner, P. and Bartkus, K.R. 2014. What's in a name? A reference guide to work-education experiences. *Asia-Pacific Journal of Cooperative Education* 15(1):37-54.

- Gebauer, H., Gustafsson, A. and Witell, L. 2011. Competitive advantage through service differentiation by manufacturing companies. *Journal of Business Research* (64)12:1270-1280.
- Gill, C. and Meyer, D. 2008. High and low road approaches to the management of human resources: An examination of the relationship between business strategy, human resource management and high performance work practices. *International Journal of Employment Studies* (16)2:67-112.
- Githens, G. 2011. A guide to the three types of strategy and business model scope. (<http://leadingstrategicinitiatives.com/2011/07/10/a-guide-to-the-three-types-of-strategy-and-business-model-scope/>) Retrieved on 2 February 2014
- Golafshani, N. 2003. Understanding reliability and validity in qualitative research. *The Qualitative Report* 8(4):597-606.
- González-Benito, J. and Suárez-González, I. 2010. A study of the role played by manufacturing strategic objectives and capabilities in understanding the relationship between Porter's generic strategies and business performance. *British Journal of Management* (21)1:1027–1043.
- Griffin, D. 2013. Four generic strategies that strategic business units use. (<http://smallbusiness.chron.com/four-generic-strategies-strategic-business-units-use-496.html>) Retrieved on 27 August 2013.
- Guan, J.C., Yam, R.C.M., Mok, C.K. and Ma N. 2006. A study of the relationship between competitiveness and technological innovation capability based on DEA models. *European Journal of Operational Research* (170)3: 971-986.
- Haddara, M. and Skanes, H. 2007. A reflection on cooperative education: from experience to experiential learning. *Asia-Pacific Journal of Cooperative Education* 8(1):67-76.



- Hahn, W. 2010. Strategic plan quality, implementation capability, and firm performance. *Academy of Strategic Management Journal* (9)1:63-81.
- Hampson, K. 2010. The concept of “competition” in higher education. (<http://higheredmanagement.net/2010/03/19/the-concept-of-competition-in-higher-education/>) Retrieved on 2 April 2014.
- Hampson, K. 2012. Good strategy/bad strategy and higher education. (<http://higheredmanagement.net/2012/03/04/good-strategybad-strategy/>) Retrieved on 23 April 2014.
- Hampson, K. 2014a. 6 tactics for expanding non-credit continuing education in universities. (<http://higheredmanagement.net/2014/02/17/6-tactics-for-expanding-non-credit-continuing-education-in-universities-part-2/>) Retrieved on 8 April 2014.
- Hampson, K. 2014b. The rise of alternatives to university continuing education. (<http://higheredmanagement.net/2014/01/25/the-rise-of-alternatives-to-university-continuing-education-part-1/>) Retrieved on 8 April 2014.
- Hara, K. 1995. Quantitative and qualitative research approaches in education. *Education* (Spring) 1995.
- Harris, B. 2010. Strategic planning. (<http://www.nvo.com/mtsae/nss-folder/publicfolder/Strategic%20Plan%20Template%201-10.pdf>) (Retrieved on 15 July 2013).
- Hassan, Ramachandran and Kamaluddin 2013. Managing market competitive strategy successfully: An empirical testing of successful generic strategy implementation leading to product quality and customer satisfaction. *International Journal of Management* (4)4:9-22.
- He, H-W. and Balmer, J.M.T. 2013. A grounded theory of the corporate identity and corporate strategy dynamic - a corporate marketing perspective. *European Journal of Marketing* (47)3/4:401-430.

- Heerde, J. and Murphy, B. 2009. Work-integrated learning annotated bibliography. *Journal of Agricultural Education* 50(4):1-44.
- Helyer, R. 2007. What is employability? Reflecting on the postmodern challenges of work-based learning. *Journal of Employability and The Humanities* Summer(1):1-12.
- Henning, E., Van Rensburg, W. and Smit, B. 2004. *Finding your way in qualitative research*. Pretoria: Van Schaik Publishers.
- Heriot, K.C., Cook, R.G., Matthews, C.H. and Simpson, L. 2007. Creating active and high impact learning. *Industry and Higher Education* 21(6):427-434.
- Hertel, G., Niedner, S. and Herrmann, S. 2003. Motivation of software developers in Open Source projects: an Internet-based survey of contributors to the Linux kernel. *Research Policy* 32(1):1159-1177.
- Higher Education Funding Council for England. 2014. National strategy for access and student success in higher education – driving forward change. (<http://www.hefce.ac.uk/news/newsarchive/2014/news86937.html>) Retrieved on 2 May 2014.
- Hole, G. 2015. The Kruskal-Wallis test. (<http://users.sussex.ac.uk/~grahamh/RM1web/Kruskal-Wallis%20Handoout2011.pdf>) Retrieved on 5 May 2015.
- Hopkins, W.G. 2000. Quantitative research design. (<http://www.sportsci.org/jour/0001/wghdesign.html>.) Retrieved on 2 July 2010.
- Horner, S.V. 2011. Board power and corporate strategic focus: A model of board impact on firm strategy. *Journal of Leadership, Accountability and Ethics* 8(4):26-41.
- Hosseini, M.H., Shakhshian, F.H., Moezzi, H. and Khaksar, S.M.S. 2011. Top management's role in coordinating human resources with corporate strategy. *International Journal of Business and Social Science* (2)12:172-179.

- Hsieh, Y.H. and Chen, H.M. 2011. Strategic fit among business competitive strategy, human resource strategy, and reward system. *Academy of Strategic Management Journal* (10)2:11-32.
- Hughes-Jones, R. 2014. What is strategy and why is it important? (<http://www.kpmgtechgrowth.co.uk/what-is-strategy-and-why-is-it-important-by-richard-hughes-jones/>) Retrieved on 20 May 2014.
- Hughes, K., Mylonas, A. and Benckendorff, P. 2013. Students' reflections on industry placement: Comparing four undergraduate work-integrated learning streams. *Asia-Pacific Journal of Cooperative Education* 14(4):265-279.
- Hundsnes, T. and Meyer, C.B. 2006. Living with paradoxes of corporate strategy: A complexity perspective. *Journal of Organizational Change Management* 19(4):437 – 446.
- Hynie, M., Jensen, K., Johnny, M., Wedlock, J. and Phipps, D. 2011. Student internships bridge research to real world problems. *Education + Training* 53(1):45-56.
- Illeris, K. 2010. *Learning, work and competence development*. Copenhagen: Roskilde University Press.
- Jackling, R.N.B., Kaider, F. and Clark, C. 2013. Mapping WIL activities in the curriculum to develop graduate capabilities: A case study in accounting. *Asia-Pacific Journal of Cooperative Education* 14(2):75-88.
- Jackson, D. 2013. The contribution of work-integrated learning to undergraduate employability skill outcomes. *Asia-Pacific Journal of Cooperative Education* 14(2):99-115.
- Jacobs, H.S. 2010. The role of work-integrated learning and service-learning in achieving critical cross-field outcomes. (Unpublished mini-dissertation in partial fulfilment of the degree MA Higher education Studies.) University of the Free State, Bloemfontein.

- Jansen, H. 2010. The logic of qualitative survey research and its position in the field of social research methods. *Forum: Social Qualitative Research* (11)2:1-15.
- Jaquier, B. 2010. What is strategy? (<http://www.ecofine.com/strategy/What%20is%20SM.htm>) Retrieved on 7 April 2014.
- Jebrin, A.H. 2012. The Fit between Business Strategies Ethics and the Approach to Total Quality Management: A Suggested Model. *Journal of Management Research* 4(1):1-30.
- Johnson, R.L. 2011. Corporate strategy and the social networking phenomena. *Journal of Service Science* (4)2:1-10.
- Keagan, G. n.d. Report writing glossary. ([www.gerardkeegan.co.uk/glossary/gloss.html](http://www.gerardkeegan.co.uk/glossary/gloss.html)) Retrieved on 8 January 2010.
- Keasler, T.R. and Denning, K.C. 2009. A re-examination of corporate strategic alliances: New market responses. *Quarterly Journal of Finance and Accounting* (48)1:21-47.
- Keating, K.M. 2008. Mentorship of hospitality management students during work-integrated learning. (Unpublished MTech dissertation.) Cape Peninsula University of Technology, Cape Town.
- Kelchner, L. 2013. The advantages of a product differentiation strategy. (<http://smallbusiness.chron.com/advantages-product-differentiation-strategy-17691.html>) Retrieved on 20 August 2013.
- Kemp, N. and Lawton, W. 2013. A strategic analysis of the Scottish higher education sector's distinctive assets. ([www.britishcouncil.org](http://www.britishcouncil.org)) Retrieved on 5 May 2014.
- Kennedy, R. 2013. How colleges and universities are successfully creating and communicating their brands. (<http://www.universitybusiness.com/article/50-best-branding-ideas>) Retrieved on 17 October 2013.

- Kerlinger, F.N. 1986. *Foundations of behavioral research*. 3<sup>rd</sup> ed. Fort Worth: Holt, Rinehart and Winston, Inc.
- Kim, W.C. and Maubourgne, R. 2005. Blue ocean strategy: From theory to practice. *California Management Review* (47)3:105-121.
- Kokemuller, N. 2014. Service quality differentiation competitive strategies. (<http://smallbusiness.chron.com/service-quality-differentiation-competitive-strategies-72197.html>) Retrieved on 3 April 2014.
- Kolb, D.A. 1984. *Experiential learning*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Kotler., P. 2003. *Marketing management*. 11<sup>th</sup> ed. Upper Saddle River: Prentice Hall.
- Kowalczyk, D. 2013. Ex post facto designs: Definition & examples. (<http://education-portal.com/academy/lesson/ex-post-facto-designs-definition-examples.html#lesson>) Retrieved on 7 August 2014.
- Kozar, J.M. and Marcketti, S.B. 2008. Utilizing field-based instruction as an effective teaching strategy. *College Student Journal*. 42(2(Part A):305-311.
- Kramer, M. and Usher, A. 2011. *Work-integrated learning and career-ready students: Examining the evidence*. Toronto: Higher Education Strategy Associates.
- Kristinsdóttir, S.B. 2008. Cognitivism. (<http://mennta.hi.is/starfsfolk/solrunb/cognitiv.htm>) Retrieved on 5 February 2014.
- Lahovnik, M. 2012. Business strategy and performance of horizontal acquisitions. (<http://connection.ebscohost.com/c/abstracts/79469258/business-strategy-performance-horizontal-acquisitions>) Retrieved on 4 April 2014.
- Leinwand, P. and Mainardi, C. 2010. Budget time: An opportunity to reinforce corporate strategy. *Corporate Finance Review* (15)3:12-16.

- Leong, R. and Kavanagh, M. 2013. A work-integrated learning (WIL) framework to develop graduate skills and attributes in an Australian university's accounting program. *Asia-Pacific Journal of Cooperative Education* 14(1):1-14.
- Lester, S. and Costley, C. 2009. Work-based learning at higher education level: value, practice and critique. (<http://eprints.mdx.ac.uk/5627/1/slccwbl.pdf>) Retrieved on 5 April 2013.
- Liu, C-H. and Wang, C-C. 2010. Formulating service business strategies with integrative services model from customer and provider perspectives. *European Journal of Marketing* (44)9/10:1500-1527.
- Mahar, S. and Hartford, M. 2004. *Human Learning*. Victoria: Department of Education and Training.
- Martin, A.J. 2013. Reflections on twenty years of practicum, partnership & practice. *Asia-Pacific Journal of Cooperative Education* 14(3):127-134.
- Martin, A. and Hughes, H. 2009. *How to make the most of work integrated learning: A guide for students, lecturers & supervisors*. Palmerston North: Massey University.
- Martin, A.J., Rees, M., Edwards, M. and Paku, L. 2012. An organization overview of pedagogical practice in work-integrated education. *Asia-Pacific Journal of Cooperative Education* 13(1):23-37.
- Maykut, P. & Morehouse, R. 1994. *Beginning qualitative research: Philosophy and practical guide*. London: The Falmer Press.
- McCurdy, S.M., Zegwaard, K.J. and Dalgety, J. 2013. Evaluating the development of science research skills in work-integrated learning through the use of workplace science tools. *Asia-Pacific Journal of Cooperative Education* 14(4):233-249.
- McEwen, C. and Trede, F. 2014. The value of workplace learning in the first year for university students from under-represented groups. *Asia-Pacific Journal of Cooperative Education* 15(1):55-67.

- McGrath, S. 2009. What is employability? ([https://www.nottingham.ac.uk/shared/shared\\_uccer/epa\\_docs/what\\_is\\_employability.pdf](https://www.nottingham.ac.uk/shared/shared_uccer/epa_docs/what_is_employability.pdf)) Retrieved on 2 February 2014.
- McIntyre, C.W. 2013. Open-ended survey questions: Challenges and opportunities. (<http://strategicinitiatives.ca/blog/qualitative-research/open-ended-survey-questions-challenges-and-opportunities/>) Retrieved on 8 August 2014.
- McLennan, B. and Keating, S. 2008. Work-integrated learning (WIL) in Australian universities: The challenges of mainstreaming WIL. ([http://tls.vu.edu.au/vu\\_college/LiWC/resources/NAGCASpaper-final10June08.pdf](http://tls.vu.edu.au/vu_college/LiWC/resources/NAGCASpaper-final10June08.pdf)) Retrieved on 29 May 2013.
- McLeod, S. 2008. Likert scale. (<http://www.simplypsychology.org/likert-scale.html>) Retrieved on 4 January 2013.
- Michail, A. 2013. The role of combined competitive strategies. (<http://strategopoly.wordpress.com/2013/01/05/the-role-of-combined-competitive-strategies-as-opposed-to-porters-1980-single-generic-strategies/>) Retrieved on 2 April 2014.
- Michie, J. and Sheehan, M. 2006. Business strategy, human resources, labour market flexibility and competitive advantage. *The International Journal of Human Resource Management* (16(3):445-464.
- Miles, P., Miles, G. and Cannon, A. 2012. Linking servicescape to customer satisfaction: exploring the role of competitive strategy. *International Journal of Operations & Production Management* (32)7:772-795.
- Morgan, L. 2014. The importance of strategy. (<http://www.lloydmorgan.com/PDF/The%20Importance%20of%20Strategy.pdf>) Retrieved on 5 May 2014.
- Morrison, M. 2013. Why higher education needs marketing more than ever. (<http://adage.com/article/cmo-strategy/higher-education-marketing/244820/>) Retrieved on 8 April 2014.

- Mosakowski, E. 1993. A resource-based perspective on the dynamic strategy-performance relationship: An empirical examination of the focus and differentiation strategies in entrepreneurial firms. *Journal of Management* 19(4):819-839.
- Muafi, M. 2009. The effects of alignment competitive strategy, culture, and role behavior on organizational performance in service firms. *The International Journal of Organizational Innovation* (1)4:106-134.
- My Market Research Methods. 2011. Descriptive vs. inferential statistics: What's the difference? (<http://www.mymarketresearchmethods.com/descriptive-inferential-statistics-difference/>) Retrieved on 10 January 2013.
- Nair, S. 2014. Apple's premium pricing strategy and product differentiation. (<http://finance.yahoo.com/news/apple-premium-pricing-strategy-product-191247308.html>) Retrieved on 2 April 2014.
- Nandakumar, M.K., Ghobadian, A. and O'Regan. N. 2011. Generic strategies and performance – evidence from manufacturing firms. *International Journal of Productivity and Performance Management* (60)3:222-251.
- National Association of Colleges and Employers. 2012. 2012 Internship & co-op survey. ([www.naceweb.org/research/intern-co-op/2012-survey/](http://www.naceweb.org/research/intern-co-op/2012-survey/)) Retrieved on 2 April 2013.
- Nduna, N.J. 2007. The community voice on service-learning: A good practice guide for higher education. *Education as change* 11(1):69-76.
- Neill, J. 2007. *Qualitative versus quantitative research: key points in a classic debate*. (<http://wilderdom.com/research/QualitativeVersusQuantitativeResearch.html>.) Retrieved on 6 June 2014.
- Newhook, R. 2013. Perceptions of risk in co-operative education. *Journal of Cooperative Education and Internships* 47(1):78-93.



- New Zealand Association for Cooperative Education. 2014. Cooperative Education Benefits. (<http://www.nzace.ac.nz/about/benefits/>) Retrieved on 23 January 2014.
- Nickols, F. 2013. Three kinds of business strategy. (<http://www.smartdraw.com/articles/blog/three-kinds-of-business-strategy.htm>) Retrieved on 23 August 2013.
- Nortcliffe, A. 2012. Embedding professional experiences and employability into Engineering Sandwich Degrees. ([http://cede.lboro.ac.uk/ee2012/papers/ee2012\\_submission\\_130\\_gp.pdf](http://cede.lboro.ac.uk/ee2012/papers/ee2012_submission_130_gp.pdf)) Retrieved on 4 June 2013.
- North Dakota State University. 2014. Cooperative education and internship program (CEIP). ([http://www.ndsu.edu/career/cooperative\\_education\\_internship\\_program\\_ceip\\_employer\\_faq/](http://www.ndsu.edu/career/cooperative_education_internship_program_ceip_employer_faq/)) Retrieved on 9 July 2014.
- Norwegian Ministry of Education and Research. 2011. North America Strategy for Higher Education Cooperation: 2012–2015. (<http://www.regjeringen.no/en/dep/kd/documents/reports-and-actionplans/Actionplans/2011/north-america-strategy-for-higher-educat.html?id=661703>) Retrieved on 10 April 2014.
- Ntshoe, I.M., Jacobs, H., Du Plessis, J. and Mangara, T. 2011. *Work integrated learning research project: research report*. Bloemfontein: Central University of Technology (CUT).
- Oltra, M.J. and Flor, M.L. 2010. The moderating effect of business strategy on the relationship between operations strategy and firms' results. *International Journal of Operations & Production Management* 30(6):612 – 638.
- Ontario Ministry of Education. 2000. Cooperative education and other forms of experiential learning. (<http://www.edu.gov.on.ca/eng/document/curricul/secondary/coop/cooped.pdf>) Retrieved on 12 June 2013.
- O'Reilly, J., McCall, A. and Khoury, D. 2010. Developing a work integrated learning unit for employability and technical skills: One size does not fit all. (<http://www.waceinc.org/hongkong/linkdocs/papers/Australia/Refereed%20Paper%204%20and%2004a.pdf>) Retrieved on 21 May 2013.

- Ormrod, J.E. 1999. *Human learning*. 3<sup>rd</sup> ed. Upper Saddle River, NJ: Prentice Hall. ([http://teachnet.edb.utexas.edu/~lynda\\_abbot/Cognitive.html](http://teachnet.edb.utexas.edu/~lynda_abbot/Cognitive.html).) Retrieved on 2 July 2009.
- Orrell, J. 2004. Work-integrated learning programmes: Management and educational quality. (<https://tls.vu.edu.au/vucollege/LiWc/resources/Orrell.pdf>) Retrieved on 4 June 2013.
- Orrell, J. 2011. Good practice report: work-integrated learning. ([http://www.olt.gov.au/system/files/resources/GPR\\_Work\\_Integrated\\_Learning\\_Orrell\\_2011.pdf](http://www.olt.gov.au/system/files/resources/GPR_Work_Integrated_Learning_Orrell_2011.pdf)) Retrieved on 4 February 2014.
- Ou, W-M. and Chai, K-W. 2007. Use of leadership and differentiation strategies by professional service firms: A case study. *International Journal of Management* (24)3:477-488.
- Oxforddictionaries.com. 2013 Strategy. ([http://oxforddictionaries.com/us/definition/american\\_english/strategy](http://oxforddictionaries.com/us/definition/american_english/strategy)) Retrieved on 18 July 2013.
- Oxford Reference. 2014. Domain-referenced test. (<http://www.oxfordreference.com/view/10.1093/oi/authority.20110803095725606>) Retrieved on 12 August 2014.
- Pacheco-Ornelas, C., Cuevas-Rodríguez, E. and Rodríguez-Pacheco, R.H. 2012. Organizational competences and competitiveness: The effect of business strategies. *Advances in Competitiveness Research* (20)3&4:16-31.
- Palomino, J.H., Medina, D.d.J.E. and Arellano, M.A. 2013. Lean business strategies for integration in the organizations. *Global Conference on Business and Finance Proceedings* (8)2:89-92.
- Papadelis, S., Flamos, A. and Androulaki, S. 2012. Setting the framework for a business strategy assessment model. *International Journal of Energy Sector Management* (6)4:488-517.

- Papakonstantinou, T., Charlton-Robb, K., Reina, R.D. and Rayner, G. 2013. Providing research-focused work-integrated learning for high achieving science undergraduates. *Asia-Pacific Journal of Cooperative Education* 14(2):59-73.
- Papadopoulos, T. and Broadbent, R. 2011. Does work integrated learning deliver? An evaluation of graduate capabilities, employability, and effective industry-university partnerships. (Paper presented at the European Academic Conference held in Barcelona Spain during 2011.)
- Parnell, J.A. 2006. Generic strategies after two decades: a reconceptualization of competitive strategy. *Management Decision* (44)8:1139-1154.
- Parnell, J.A. 2010. Strategic clarity, business strategy and performance. *Journal of Strategy and Management* (3)4:304-324.
- Passarelli, A.M. and Kolb, D.A. 2012. Using experiential learning theory to promote student learning and development in programs of education abroad. (<http://learningfromexperience.com/media/2012/02/using-experiential-learning-theory-to-promote-student-learning-and-development-in-programs-of-education-abroad.pdf>) Retrieved on 26 January 2014.
- Patrick, C-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M. and Pretto, G. 2008. The WIL [Work Integrated Learning] report: A national scoping study [Australian Learning and Teaching Council (ALTC) Final report]. Brisbane: Queensland University of Technology. Available online at: [www.altc.edu.au](http://www.altc.edu.au) and [www.acen.edu.au](http://www.acen.edu.au)
- Pegg, A., Waldock, J., Hendy-Isaac, S. and Lawton, R. 2012. *Pedagogy for employability*. Heslington: The Higher Education Academy.
- Pertusa-Ortega, E.M., Molina-Azorín, J.F. and Claver-Cortés, E. 2010. Competitive strategy, structure and firm performance - A comparison of the resource-based view and the contingency approach. *Management Decision* (48)8:1282-1303.

- Polit, D. and Hungler, B. 2004. *Nursing research, principles and methods*. Philadelphia: Lippincourt.
- Porter, M.E. 1991. Towards a dynamic theory of strategy. *Strategic Management Journal* 12(special issue):95-117.
- Porter, M.E. 1996. What is strategy? *Harvard Business Review* 74(6):61-78.
- Porter, M.E. 2006. The five competitive forces that shape strategy. ([http://file.isforu.com/file\\_dir/niceprof/attachment/00000/00005/00008/08dfa6c53dfa5b12015dcc8ca24e043d.pdf](http://file.isforu.com/file_dir/niceprof/attachment/00000/00005/00008/08dfa6c53dfa5b12015dcc8ca24e043d.pdf)) Retrieved on 6 March 2014.
- Potgieter, S. 2003. The influence of a cooperative learning strategy on mathematics test results of pre-technician students at the Port Elizabeth Technikon. (Unpublished MEd dissertation.) University of Port Elizabeth, Port Elizabeth.
- Powell, S., Tindal, I. and Millwood, R. 2008. Personalized learning and the ultraversity experience. *Interactive Learning Environments* 16(1):63-81.
- Purcell, W. 2011. Positioning universities: how HEIs can develop distinctiveness strategies? (<http://www.theguardian.com/higher-education-network/blog/2011/may/19/positioning-universities-distinctiveness>) Retrieved on 6 May 2014.
- Purdie, F., Ward, L., McAdie, T., King, N. and Drysdale, M. 2013. Are work-integrated learning (WIL) students better equipped psychologically for work post-graduation than their non-work-integrated learning peers? Some initial findings from a UK university. *Asia-Pacific Journal of Cooperative Education* 14(2):117-125.
- Queensland Government. 2011. Strategic plan template. ([http://www.arts.qld.gov.au/publications/docs/te\\_pl\\_bpt.doc](http://www.arts.qld.gov.au/publications/docs/te_pl_bpt.doc)) Retrieved on 17 July 2013.
- Raelin, J.A., Bailey, M.B., Hamann, J., Pendleton, L.K., Raelin, J.D., Reisberg, R. and Whitman, D. 2011. The effect of cooperative education on change in self-efficacy among undergraduate students: introducing work self-efficacy. *Journal of Cooperative Education and Internships* 45(2):17-35.

- Rajasekar, J. and Fouts, P. 2009. Strategic alliances as a competitive strategy: How domestic airlines use alliances for improving performance. *International Journal of Commerce and Management* (19)2:93-114.
- Rampersad, G. and Patel, F. 2014. Creativity as a desirable graduate attribute: Implications for curriculum design and employability *Asia-Pacific Journal of Cooperative Education* 15(1):1-11.
- Razak, Ilias and Rahman 2009. Differentiation strategies of internet retailing (unique, value and return): A focused web evaluation into airline service provider. *International Business Research* (2)2:40-47.
- Razali, N.M. and Wah, Y.B. 2011. Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics* 2(1):21-33.
- Reddan, G. 2013. To grade or not to grade: Student perceptions of the effects of grading a course in work-integrated learning. *Asia-Pacific Journal of Cooperative Education* 14(4):223-232.
- Research Connections. 2013. Experiments and quasi-experiments. (<http://www.researchconnections.org/childcare/datamethods/experimentsquasi.jsp>) Retrieved on 8 August 2014.
- Richards, J., Sweet, L. and Billett, S. 2013. Preparing medical students as agentic learners through enhancing student engagement in clinical education. *Asia-Pacific Journal of Cooperative Education* 14(4):251-263.
- Richardson, J., Jackling, B., Henschke, K. & Tempone, I. 2013. Developing a collaborative model of industry feedback for work placement of business students. *Asia-Pacific Journal of Cooperative Education* 14(1):28-43.
- Rivera, G. 2013. What strategy is NOT. (<http://interactioninstitute.org/blog/2013/05/07/what-strategy-is-not/>) Retrieved on 4 April 2014.

- Robeck, J., Pattison, A., Pate, S. and Pattison, J 2013. The impact of fashion merchandising internships on careers. *Journal of Cooperative Education and Internships* 47(1):31-44.
- Roddy, K and Allsop, L. 2006. Creating effective questionnaires and surveys and analysing the data. (<http://www.lse.ac.uk/library/versions/Creating%20effective%20questionnaires%20and%20surveys.pdf>) Retrieved on 7 August 2014.
- Rose, P. 2013. Internships: Tapping into China's next generation of talent. *Asia-Pacific Journal of Cooperative Education* 14(2):89-98.
- Sator, A. and Amundsen, C. 2011. An exploration of transfer of learning opportunities in an online co-operative education preparatory curriculum. *Journal of Cooperative Education and Internships* 45(2):50-61.
- Sattler, P. & Peters, J. 2012. *Work-Integrated Learning and Postsecondary Graduates: The perspective of Ontario employers*. Toronto: Higher Education Quality Council of Ontario.
- Seedee, R. 2012. Moderating role of business strategies on the relationship between best business practices and firm performance. *International Journal of Business and Social Science* (3)24:137-150.
- Short, K.M. 2014. CCP's competitive advantage analysis. (<http://www.claytoncapitalpartners.com/whitepapers/whitepapers-caa.html>) Retrieved on 4 February 2014.
- Skills for Life Network. 2014. What are employability skills? (<http://www.skillsforlife.network.com/article/employability-skills/3947>) Retrieved on 2 February 2014.
- Slater, S.F., Olson, E.M. and Finnegan, C. 2011. Business strategy, marketing organization culture, and performance. *Marketing Letters* (22)3:227-242.
- Smith, C. and Simbag, V. n.d. Griffith Institute for higher education good practice guide on WIL in the curriculum. ([www.griffith.edu.au/gihe](http://www.griffith.edu.au/gihe)) Retrieved on 8 January 2010.

- Smith, M.K. 2003. Learning theory: models, product and process. (<http://infed.org/mobi/learning-theory-models-product-and-process/>) Retrieved on 2 July 2009.
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P. and Tyler, J. 2009. *Career development learning: maximising the contribution of work-integrated learning to the student experience*. Wollongong: University of Wollongong.
- Smt Z.S. Patel College of Management and Technology. 2014. Developing & communicating a positioning strategy. (<http://zspatel.org/upload/files/BBA%20Notes/sybba3%20mkt%20postioning%E2%80%8F.pdf>) Retrieved on 5 March 2014.
- Sollosy, M.D. 2013. A contemporary examination of the miles and snow strategic typology through the lenses of dynamic capabilities and ambidexterity. (Unpublished PhD dissertation.) Kennesaw State University, Georgia.
- Spencer, X.S., Joiner, T.A. and Salmon, S. 2009. Differentiation strategy, performance measurement systems and organizational performance: Evidence from Australia. *International Journal of Business* 14(1):83-103.
- Stanford University. 2014. Strategy and marketing primer. ([www.stanford.edu/class/msande473/483primerV3.doc](http://www.stanford.edu/class/msande473/483primerV3.doc)) Retrieved on 1 May 2014.
- Stavrou, E.T. and Brewster, C. 2005. The Configurational Approach to Linking Strategic Human Resource Management Bundles with Business Performance: Myth or Reality? *Management Revue* (16)2:186-201.
- Steenkamp, A.E. 2007. Bridge to the working world: a qualitative study of the work-integrated learning experience of the clothing and interior decorating diplomats at Vaal University of Technology. (Unpublished MTech dissertation.) University of Johannesburg, Johannesburg.
- Stefanovska, L. 2014. Challenges in creating competitive strategies – comparison between production and service activities. *Indian Journal of Commerce & Management Studies* (V)1:1-8.

- Stewart, G. and Chakraborty, A. 2011. Public sector strategy classification system for shared service identification. (<http://eprints.qut.edu.au/44007/1/44007.pdf>) Retrieved on 4 April 2014.
- Stoker, D.J. 1981. Sampling in practice. *University of Pretoria, New Edition* 178.
- Sturre, V., Keele, S., Von Treuer, K., Moss, S., McLeod, J. and Macfarlane, S. 2012. Construction of an instrument to measure effectiveness of placement settings and experiences. *Asia-Pacific Journal of Cooperative Education* 13(4): 225-238.
- Survio. 2013. What is quantitative research? (<http://www.survio.com/en/blog/popular-series/what-is-quantitative-research#.VC47DxX8LDc>) Retrieved on 7 August 2014.
- Sutherland, K. and Symons, M. 2013. Issues and challenges identified in the development of a broad multidisciplinary work integrated learning package. *Asia-Pacific Journal of Cooperative Education* 14(4):295-304.
- Svacina, L.S. 2012. A review of research on unpaid internship legal issues: Implications for career services professionals. *Journal of Cooperative Education and Internships* 46(1):77-87.
- Sweeney, M. and Lillis, B. 2012. Auditing strategic business management. *Management Services* 56(4):44-47.
- Swirski, T. and Simpson, M.D. 2012. Re-imagining work-integrated learning through slow innovation in higher education. *Asia-Pacific Journal of Cooperative Education* 13(4):239-253.
- Tanwar, R. 2013. Porter's generic competitive strategies. *Journal of Business and Management* (15)1:11-17.
- Teeratansirikool, L., Siengthai, S., Badir, A. and Charoenngam, C. 2013. Competitive strategies and firm performance: the mediating role of performance



measurement. *International Journal of Productivity and Performance Management* (62)2:168-184.

*The Economist*. 2013. Why a strategy is not a plan. (<http://www.economist.com/news/books-and-arts/21588834-strategies-too-often-fail-because-more-expected-they-can-deliver-why>) Retrieved on 7 April 2014.

*The Economist*. 2014. Harvard's exit strategy. (<http://www.economist.com/blogs/freeexchange/2014/02/higher-education>) Retrieved on 8 April 2014.

The Higher Education Academy. 2011. The Higher Education Academy Strategic Plan 2012–2016. ([www.heacademy.ac.uk](http://www.heacademy.ac.uk)) Retrieved on 7 April 2014.

The Higher Education Academy. 2012. Pedagogy for employability. ([http://www.heacademy.ac.uk/resources/detail/employability/pedagogy\\_for\\_employability\\_update\\_2012](http://www.heacademy.ac.uk/resources/detail/employability/pedagogy_for_employability_update_2012)) Retrieved on 2 February 2014.

The Joint University Council. 2006. A social work research strategy in higher education: 2006–2020. London: Social Care Workforce Research Unit.

*The Research Ethics Guidebook*. 2015. A resource for social scientists. (<http://www.ethicsguidebook.ac.uk/what-needs-to-go-in-the-ethics-statement-20>) Retrieved on 7 March 2015.

The Strategy Group. 2011. National Strategy for Higher Education to 2030. Dublin: Department of Education and Skills.

*The Times 100*. 2013. Business Strategy. (<http://businesscasestudies.co.uk/business-theory/strategy/business-strategy.html#axzz2dMUy7eAb>) Retrieved on 26 August 2013.

The Virtual Psychology Classroom. 2011. *Research methods*. (<http://allpsych.com/researchmethods/quasiexperimentaldesign.html>) Retrieved on 6 August 2014.

- The World Press*. 2009. Competitive advantage. (<http://saravanesh.files.wordpress.com/2009/06/competitive-advantag1.doc>) Retrieved on 26 February 2014.
- Thompson, A.A., Peteraf, M.A., Gamble, J.E. and Strickland III, A.J. 2014. Crafting and executing strategy. (<http://nraomtr.blogspot.com/2013/05/crafting-and-executing-strategy.html>) Retrieved on 30 May 2014.
- Trede, F. 2012. WIL and professional identity. *Asia-Pacific Journal of Cooperative Education* 13(3):159-167.
- Trinity College Dublin. 2002. Constructivism: Constructivist theory and social development theory. ([https://www.cs.tcd.ie/disciplines/information\\_systems/crite/crite\\_web/lpr/teaching/constructivism.html](https://www.cs.tcd.ie/disciplines/information_systems/crite/crite_web/lpr/teaching/constructivism.html)) Retrieved on 6 February 2014.
- Trivellas, P., Reklitis, P. and Konstantopoulos, N. 2007. A dynamic simulation model of organizational culture and business strategy effects on performance. ([http://www.researchgate.net/publication/253047935A\\_Dynamic\\_Simulation\\_Model\\_of\\_Organizational\\_Culture\\_and\\_Business\\_Strategy\\_Effects\\_on\\_Performance](http://www.researchgate.net/publication/253047935A_Dynamic_Simulation_Model_of_Organizational_Culture_and_Business_Strategy_Effects_on_Performance)) Retrieved on 25 February 2014.
- Trochim, W.M.K. 2006. Research methods. (<http://www.socialresearchmethods.net/kb/scallik.php>) Retrieved on 4 January 2013.
- University of California. 2007. Strategic planning. ([http://socrates.berkeley.edu/~pbd/pdfs/Strategic\\_Planning.pdf](http://socrates.berkeley.edu/~pbd/pdfs/Strategic_Planning.pdf)) Retrieved on 18 July 2013.
- University of California Berkeley. 2011. Overview of learning theories. (<https://gsi.berkeley.edu/teachingguide/theories/overview.html>) Retrieved on 29 November 2012.
- University of Canberra. 2010. Work integrated learning. <http://www.canberra.edu.au/wil/attachments/pdf/wil-brochure.pdf>) Retrieved on 28 March 2012.

- University of Cincinnati. 2014. Experiential learning. (<http://www.uc.edu/provost/about-us/profile/undergraduate-affairs/icl/experiential-learning.html>) Retrieved on 1 July 2014.
- University of Edinburgh. 2011. What is employability? (<http://www.employability.ed.ac.uk/What/#Definitions>) Retrieved on 2 February 2014.
- University of Leicester. 2009. The role of work-integrated learning in academic performance: Is there correlation between industrial placements and degree performance? (<http://www.waceinc.org/hongkong/linkdocs/papers/UK/Refereed%20Paper%203.pdf>) Retrieved on 29 March 2012.
- University of Massachusetts Dartmouth. 2014. College/university benefits. ([http://www1.umassd.edu/engineering/coop/about\\_us/benefit\\_university.cfm](http://www1.umassd.edu/engineering/coop/about_us/benefit_university.cfm)) Retrieved on 23 January 2014.
- University of Sheffield. 2014. Questionnaires. (<http://www.shef.ac.uk/lets/strategy/resources/evaluate/general/methods-collection/questionnaire>) Retrieved on 8 August 2014.
- University of Waterloo. 2011. Co-operative education & career action systems Strategy. (<http://uwaterloo.ca/co-operative-education-career-action-systems/about-our-systems-strategy>) Retrieved on 29 May 2014.
- University of Waterloo. 2014a. About co-operative education. (<https://uwaterloo.ca/co-operative-education/about-co-operative-education>) Retrieved on 30 May 2014.
- University of Waterloo. 2014b. Why co-op? (<https://uwaterloo.ca/co-operative-education/why-co-op>) Retrieved on 30 May 2014.
- University of the West of England. 2013. *Positivist/scientific research*. (<http://ro.uwe.ac.uk/RenderPages/RenderLearningObject.aspx?Context=7&Area=1&Room=3&Constellation=24&LearningObject=104>) Retrieved on 17 January 2013

- University of Wisconsin. 2012. Data collection methods. (<http://people.uwec.edu/piercech/researchmethods/data%20collection%20methods/data%20collection%20methods.htm>) Retrieved on 4 January 2013.
- University of Worcester. 2014. What is employability? (<http://www.worc.ac.uk/adpu/1115.htm>) Retrieved on 2 February 2014.
- Usher, A. 2011. Can universities compete? (<http://higherstrategy.com/can-universities-compete/>) Retrieved on 5 May 2014.
- Usher, A. 2012a. Measuring work integrated learning: The development of the meta-competency test. *Journal of Cooperative Education and Internships* 46(1):5-15.
- Usher, A. 2012b. Victoria University learning in the workplace and community: Connecting partners, connecting fields, connecting learning. *Asia-Pacific Journal of Cooperative Education* 13(1):13-22.
- Vermeulen, F. 2013. What strategy is not. (<http://www.forbes.com/sites/freekvermeulen/2013/11/22/what-strategy-is-not/>) Retrieved on 8 April 2014.
- Volschenk, D.E. 2005. Cooperative learning as education strategy in colleges for further education. (Unpublished MEd dissertation.) University of Johannesburg, Johannesburg.
- Voola, R. and O'Cass, A. 2010. Implementing competitive strategies: the role of responsive and proactive market orientations. *European Journal of Marketing* (44)1/2:245-266.
- Walters, B.A. 2013. Generic competitive strategies. (<http://www.referenceforbusiness.com/management/Ex-Gov/Generic-Competitive-Strategies.html>) Retrieved on 27 August 2013.
- Waweru, M.A.S. 2011. Comparative analysis of competitive strategy implementation. *Journal of Management and Strategy* (2)3:49-61.

- Weir, T. 2014. Effective leaders need to grasp what strategy means. (<http://www.thenational.ae/business/industry-insights/the-life/tommy-weir-effective-leaders-need-to-grasp-what-strategy-means>) Retrieved on 8 April 2014.
- Wessels, M.L. 2007. Guidelines for the implementation of cooperative education in South African teaching and learning organisations in higher education. (Unpublished PhD thesis.) North-West University, Potchefstroom.
- Western Oregon University. 2014. Toyota's uses both differentiation and low cost as generic strategies to try and gain a competitive advantage over their competitors in the automotive industry. (<http://www.wou.edu/>) Retrieved on 2 March 2014.
- Weston, W.D., Way, R.F. and Hutcheson, P. 2003. *Key strategies, challenges, and lessons learned from the higher education partnerships to enhance work-based learning grants*. Oak Ridge: Oak Ridge Institute for Science and Education.
- Williams, C. 2010. Understanding the essential elements of work-based learning and its relevance to everyday clinical practice. (<http://www.ncbi.nlm.nih.gov/pubmed/20840356>) Retrieved on 4 July 2014.
- Williams, E. 2011. Research paradigm and philosophy. (<http://www.howtodo.dissertationhelpservice.com/research-paradigm-and-philosophy>) Retrieved on 17 January 2013.
- Williams, G.C. 2006. Independent & dependent variables. (<http://www.uncp.edu/home/collierw/ivdv.htm>) Retrieved on 17 October 2013.
- Wilson, K. and Fowler, J. 2005. Assessing the impact of learning environments on students' approaches to learning: comparing conventional and action learning designs. *Assessment & Evaluation in Higher Education*. 30(1):87-101.
- Wiredu, G.O. 2005. Mobile computing in work-integrated learning: problems of remotely-distributed activities and technology use. (Unpublished PhD dissertation.) University of London, London.

- Yoo, J.W., Lemak, D.J. and Choi, Y. 2006. Principles of management and competitive strategies: using Fayol to implement Porter. *Journal of Management History* (12)4:352-368.
- Yorke, M. 2006. *Employability in higher education: what it is – what it is not*. Heslington: The Higher Education Academy.
- Youngblood, T. 2008. How to hold on to and leverage superior sales knowledge. ([http://impressions.issshows.com/archived-article.shtml?articletitle=PROMOTIONAL%20PRODUCTS-HEADLINE\\_How%20to%20Hold%20On%20to%20and%20Leverage%20Superior%20Sales%20Knowledge\\_278.xml&imw=Y\)ruary](http://impressions.issshows.com/archived-article.shtml?articletitle=PROMOTIONAL%20PRODUCTS-HEADLINE_How%20to%20Hold%20On%20to%20and%20Leverage%20Superior%20Sales%20Knowledge_278.xml&imw=Y)ruary) Retrieved on 7 February 2014.
- Zaiontz, C. 2013. Shapiro-Wilk original test. (<http://www.real-statistics.com/tests-normality-and-symmetry/statistical-tests-normality-symmetry/shapiro-wilk-test/>) Retrieved on 27 April 2015.
- Zegwaard, K.E. and Coll, R.K. 2011. Exploring some current issues for cooperative education. *Journal of Cooperative Education and Internships* 45(02):8-16.
- Zegwaard, K.E. and McCurdy, S. 2014. The influence of work-integrated learning on motivation to undertake graduate studies. *Asia-Pacific Journal of Cooperative Education* 15(1):13-28.

## **ANNEXURE 1: EMPLOYERS' QUESTIONNAIRE**

Dear Employer

You have been selected by means of convenience sampling to be a potential respondent in my DTech Business Administration study under supervision of Prof. Albert Strydom. The topic of my study is: A strategy to optimise the contribution of Work Integrated Learning towards the employability of students of the Central University of Technology, Free State.

Literature supports the view that the placement of students for Work Integrated Learning (WIL) with employers enhances the employability of students. This assertion is primarily based on the assumption that the skills that students develop during WIL are the skills required by employers from future employees. Although the same benefits or set of skills developed are reported in literature in some cases, not everyone had reported the same set of skills developed through WIL. It therefore has to be determined which imbalances exist between the skills possessed by students and those required by employers; what are the five most important skills in every industry or occupation; what is the best way(s) to acquire those skills by structuring the preparation of students and employers, monitoring, mentoring, assessment and debriefing of students in such a way that it will optimally enhance the employability of students. The question therefore is: What specifically about WIL enhances the employability of students and how can this be optimised in a strategy?

It is not required of you to reveal your name or other personal details, which means that your anonymity and confidentiality are assured. Your honest opinion and rating will be greatly appreciated.

Thank you for your cooperation.

Henri Jacobs

DTech: Business Administration student

**Instructions:**    ***Please mark your answer with an 'X'***  
                               ***Write your answer on the space provided***  
                               ***Please be frank with you answers***

<b>SECTION A: General Information</b>
---------------------------------------

- 1.      Please select the relevant qualification(s) of students that you have accommodated for WIL from CUT:**

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- 2.      For how many years have you been involved with WIL students? ..... years**
- 3.      What is your current position in your organization? .....**
- 4.      In which province is your organization situated where students do WIL? (May select more than one option if applicable)**

<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Free State Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>North-West Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Gauteng Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Northern Cape Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Limpopo Province</td></tr> </table>		Free State Province		North-West Province		Gauteng Province		Northern Cape Province		Limpopo Province	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Kwa-Zulu Natal Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Western Cape Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Mpumalanga Province</td></tr> <tr><td style="width: 40px; height: 25px; border: 1px solid black;"></td><td>Eastern Cape Province</td></tr> </table>		Kwa-Zulu Natal Province		Western Cape Province		Mpumalanga Province		Eastern Cape Province
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	Kwa-Zulu Natal Province																		
	Western Cape Province																		
	Mpumalanga Province																		
	Eastern Cape Province																		



**5. How many employees are there in total in your organization?**

	1 – 50
	51 – 100
	101 – 500
	501 – 1 000
	1001 +

**SECTION B: Previous Accommodation of WIL students**

6. What is the average number of CUT students per year that your organization has accommodated for 2011 to 2014? .....(average per year)
7. What is the total number of students accommodated for WIL from 2011 to 2014 (from both the CUT and other institutions)? .....
8. How many CUT students were offered employment after completion of WIL at your organization from 2011 to 2014? .....
9. How many CUT students (excluding WIL students) were offered employment at your organization from 2011 to 2014? .....

**SECTION C: Skills and qualities of students**

9.1 Firstly, in the table below please list the top 5 skills and qualities that you think that students should have when graduating from university to be appointed as an employee with an employer within your field of study.

9.2 Secondly, also indicate your level of satisfaction with the actual skills and qualities that students have attained.

Skills and qualities	Level of satisfaction with the actual skills and qualities attained				
	Poor	Below average	Average	Good	Excellent
<i>E.g. Nice smile</i>			<b>x</b>		
<b>1.</b>					
<b>2.</b>					
<b>3.</b>					
<b>4.</b>					
<b>5.</b>					

**10. Which one of the skills/qualities that you have selected above do you regard to be the most important?**

.....

**10.1 Please elaborate why this quality is the most important:**

.....

.....

.....

**11. Regarding the employability of students, should the skills and qualities identified to better prepare students be included as part of their curriculum?**

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	Don't know

**11.1 If YES, please indicate how it should be included in the curriculum:**

<input type="checkbox"/>	Module
<input type="checkbox"/>	Simulation
<input type="checkbox"/>	Project
<input type="checkbox"/>	Case Study

☐

Other, please specify: .....

**12. Please indicate any other suggestions you would like to make in terms of the curriculum that will enhance students' employability:**

.....

.....

.....

**13. Please specify the relevant qualification(s) name(s) you are involved in (e.g. Education: BEd or PGCE; Clinical Technology: Perfusion, Cardiology, etc.):**

.....

*The following questions/statements relate to the structure of the WIL component in the qualifications applicable to you.*

**To get the most out of WIL, please indicate your preferences regarding the following:**

<b>14. How many times should students be placed for WIL over the length of the qualification?</b>								
Once			Twice			Three times		
<b>15. When should students be placed for WIL?(May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
<b>16. Timing of placement during the relevant year(s) that students are placed(May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year
<b>17. How long should the period of WIL be during the relevant year(s) that students are placed?(May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		

3 months	6 months	1 year	3 months	6 months	1 year	3 months	6 months	1 year
18. Any other suggestions you wish to make:								

#### SECTION D: Work Integrated Learning Quality Cycle

*The WIL quality cycle contains the following elements: preparation of students; preparation of employers; placement process; monitoring by the university; mentoring and supervision by employers; assessment by the university and employers; debriefing.*

##### **(A) Preparation of students**

**19.** What should the CUT focus on regarding the preparation of students on campus before they are placed for WIL? **Please indicate the level of importance from the list below as either essential, useful or not necessary.** (Space is also provided to add to the list should you have more suggestions.)

Topic	Essential	Useful	Not necessary
19.1 Expectations from the workplace			
19.2 Work ethics			
19.3 Professional behaviour			
19.4 Time management			
19.5 CV writing			
19.6 Interview skills			
19.7 Relationships			
19.8 Confidentiality			
19.9 Responsibility			

<b>19.10</b> Punctuality			
<b>19.11</b> Attitude			
<b>19.12</b> Team work			
<b>19.13</b> Communication (written)			
<b>19.14</b> Communication (verbal)			
<b>19.15</b> Appearance (dress code)			
<b>19.16</b> Other, specify:			

**20. Which one of the topics in the table above do you regard to be the most important?**

.....

**20.1 Please elaborate why this topic is the most important:**

.....  
 .....

**21. What can be done additionally with the preparation of students that will enhance their employability?**

.....  
 .....  
 .....

**21.1 How should your suggestion(s) in question (21) be implemented?**

.....  
 .....  
 .....

**(B) Preparation of employers**

*Employers also need to be prepared and/or approved by CUT for the placement of students for WIL.*

**22. What is the single most important thing that the CUT should do with employers in this regard?**

.....  
 .....

**22.1 Please explain why:**

.....

.....

.....

**23. What can be done additionally with the preparation of employers that will enhance students' employability?**

.....

.....

.....

**23.1 How should your suggestion(s) in question (23) be implemented?**

.....

.....

.....

**(C) Placement process**

*The placement of students with participating employers can be done in various ways.*

**24. Please indicate your choice from the list below as preferred, useful or not necessary. (Space is also provided to add to the list should you have more suggestions.)**

Methods	Preferred	Useful	Not necessary
<b>24.1</b> CV, cover letter and interview together with a recommendation from CUT			
<b>24.2</b> CV, cover letter and interview			
<b>24.3</b> CV and interview			
<b>24.4</b> CV, cover letter and recommendation from CUT			
<b>24.5</b> CV and recommendation from CUT			
<b>24.6</b> Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer			
<b>24.7</b> Students to approach employers on their own with a follow-up done by CUT			

<b>24.8</b> Placements to be handled by one representative form CUT			
<b>24.9</b> Other, specify:			

**25. What can be done additionally with the placement of students that will enhance their employability?**

.....

.....

.....

.....

**25.1 How should your suggestion(s) in question (25) be implemented?**

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***(D) Monitoring of students placed by CUT***

*Students placed with employers need to be monitored by CUT to determine the progress made by students in terms of the training required as well as to determine employers' satisfaction and to elicit comment on the students' progress.*

**26. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required. (Space is also provided to add to the list should you have more suggestions.)**

Methods	Importance			Frequency of contact			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>26.1</b> Personal visit by a representative from CUT							
<b>26.2</b> Communication via telephone							
<b>26.3</b> Communication via e-mail							
<b>26.4</b> Communication via fax or letter							

26.5 Other, specify:

27. Which one of the methods above do you regard to be the most important?

.....

27.1 Please elaborate on your choice: .....

.....

28. What can be done additionally with the monitoring of students that will enhance their employability?

.....

.....

.....

.....

28.1 How should your suggestion(s) in question (28) be implemented?

.....

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**(E) Mentoring and supervision by employers**

*Mentoring is generally understood to be the passing on of wisdom and knowledge by a mature and experienced person to a younger and less experienced individual. Words typically associated with mentoring include lead, guide, coach, advise, teach and counsel. Supervision by contrast refers to the overseeing of the performance of another. Ideally, a student will have both a mentor and supervisor(s), although both roles could be fulfilled by one person.*

Since the aim of this study is to optimize the contribution that WIL makes towards enhancing the employability of students, kindly indicate the following:

29. How should the mentorship and supervision of students placed for WIL be done?


Separate mentor and supervisor(s)

Combine mentor and supervisor(s)

Other, please specify: .....



**29.1 Please explain the reason(s) for your choice in question (29):**

.....

.....

.....

**30. How can the functions of mentorship and supervision be enhanced?**

Activity	Indicate	
	Yes	No
<b>30.1</b> Provide guidelines with regards to mentorship and supervision to employers		
<b>30.2</b> Provide templates to be used for mentoring and supervision to employers		
<b>30.3</b> Other, specify:		

**30.4 Please explain the reason(s) for your choice(s):**

.....

.....

.....

.....

**31. What can be done additionally with the mentorship and supervision of students placed for WIL that will enhance their employability?**

.....

.....

.....

**31.1 How should your suggestion(s) in question (31) be done?**

.....

.....

.....

**(F) Assessment of WIL by the university and employers**

- 32. How should students be assessed? Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required.**(Space is also provided to add to the list should you have more suggestions.)

Methods	Importance			Frequency of assessment			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>32.1</b> Written assessment							
<b>32.2</b> Oral assessment							
<b>32.3</b> Practical demonstration							
<b>32.4</b> Reflection journal/reports by students							
<b>32.5</b> Assessment in workplace by CUT representative							
<b>32.6</b> Other, specify:							

- 33. Which one of the methods in the table above do you regard to be the most important?**

.....

- 33.1**Please explain why this method is the most important:

.....

.....

.....

- 34. What can be done additionally with the assessment of students placed for WIL that will enhance their employability?**

.....

.....

.....

- 34.1 How should your suggestion(s) in question (34) be done?**

.....

.....

**(G) Debriefing**

*During debriefing, students need to reflect on their experiences and provide feedback on their WIL experiences. This enables students, staff and employers to learn from the experiences students had.*

- 35. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) debriefing is required. (Space is also provided to add to the list should you have more suggestions to improve this practice.)**

Methods	Importance			Frequency of debriefing			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>35.1</b> Student debrief with employer							
<b>35.2</b> Student debrief with CUT							
<b>35.3</b> CUT debrief with employer							
<b>35.4</b> Presentation							
<b>35.5</b> Written report							
<b>35.6</b> Oral debrief							
<b>35.7</b> Template to assist with the structuring of debriefing							
<b>35.8</b> Other, specify:							

- 36. Which one of the methods in the table above do you regard to be the most important?**

.....

- 36.1. Please explain why this method is the most important:**

.....

.....

**37. What can be done additionally with the debriefing of students placed for WIL that will enhance their employability?**

.....

.....

.....

**37.1 How should your suggestion(s) in question (37) be done?**

.....

.....

.....

**SECTION E: General Issues Related To WIL**

**38. From the table below please rate the level of importance of each of the reason(s) why you accommodate students for WIL.**

**Please indicate your choice with an (X) in the appropriate box**

Reasons	Level of importance for accommodating students for WIL				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
<b>38.1</b> Recruitment method					
<b>38.2</b> Financial benefits					
<b>38.3</b> Social responsibility					
<b>38.4</b> To influence the curriculum					
<b>38.5</b> Participate in the provision of future staff for their relevant industry					
<b>38.6</b> Creating a pool of applicants to use in the future					
<b>38.7</b> Enhancement of productivity					
<b>38.8</b> To ease the workload during peak periods					
<b>38.9</b> To partner with a university					

<b>38.10</b> The services rendered by a university regarding WIL					
<b>38.11</b> Other, specify:					

**39. Which one of the reasons in the table above do you regard to be the most important?**

.....

**39.1 Please explain why this reason is the most important:**

.....

.....

.....

**40. Would you prefer to appoint students in your organization who had completed WIL as opposed to students who did not complete WIL?**

	<b>Yes</b>
	<b>No</b>
	<b>Don't know</b>

**40.1 Please explain the reason(s) for your choice:**

.....

.....

**41. What specifically about WIL enhances the employability of students?**

.....

.....

.....

**42. Please indicate your level of agreement with each of the statements below.**

Statement		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1.	The manner in which students are prepared for WIL will influence my choice whether to accommodate students for WIL from a particular university					
2.	The manner in which my organization is communicated with to prepare my organization for WIL will influence my choice whether to accommodate students for WIL from a particular university					
3.	The manner in which the placement process for WIL is dealt with by the university will influence my choice whether to accommodate students for WIL from a particular university					
4.	The manner in which the monitoring of students placed for WIL at my organization is dealt with by the university will influence my choice whether to accommodate students for WIL from a particular university					
5.	The manner in which my organization is guided regarding the mentoring and supervision of students placed for WIL with us will influence my choice whether to accommodate students for WIL from a particular university					
6.	The manner in which the assessment of students for WIL are handled between my organization and a university will influence my choice whether to accommodate students for WIL from a particular university					
7.	The manner in which the debriefing of students for WIL are handled between my organization and a university will influence my choice whether to accommodate students for WIL from a particular university					

43. The most important reason(s) why I would prefer one university to another regarding WIL is because of the following service(s) I want rendered by the university:

.....

.....

.....

.....

.....

44. The most important reason(s) why I would prefer students from one university to another regarding WIL is because of the following:

.....

.....

.....

.....

.....

<b>SECTION F: SWOT Analysis</b>
---------------------------------

45. Kindly provide your assistance in completing a SWOT analysis of WIL at CUT.

- 45.1 The greatest **STRENGTH** of WIL at CUT is:

.....

.....

- 45.2 The greatest **WEAKNESS** of WIL at CUT is:

.....

.....

- 45.3 The greatest **OPPORTUNITY** for WIL at CUT is:

.....

.....

- 45.4 The greatest **THREAT** to WIL at CUT is:

.....

.....

***THANK YOU VERY MUCH FOR YOUR TIME AND ASSISTANCE OFFERED - IT IS GREATLY APPRECIATED.***

## **ANNEXURE 2: LECTURERS' QUESTIONNAIRE**

Dear Lecturer

You have been selected by means of purposive sampling to be a potential respondent in my DTech Business Administration study under supervision of Prof. Albert Strydom. The topic of my study is: A strategy to optimise the contribution of Work Integrated Learning towards the employability of students of the Central University of Technology, Free State.

Literature supports the view that the placement of students for Work Integrated Learning (WIL) with employers enhances the employability of students. This assertion is primarily based on the assumption that the skills that students develop during WIL are the skills required by employers from future employees. Although the same benefits or set of skills developed are reported in literature in some cases, not everyone had reported the same set of skills developed through WIL. It therefore has to be determined which imbalances exist between the skills possessed by students and those required by employers; what are the five most important skills in every industry or occupation; what is the best way(s) to acquire those skills by structuring the preparation of students and employers, monitoring, mentoring, assessment and debriefing of students in such a way that it will optimally enhance the employability of students. The question therefore is: What specifically about WIL will enhance the employability of students and how can this be optimised in a strategy?

It is not required of you to reveal your name or other personal details, which means that your anonymity and confidentiality are assured. Your honest opinion and rating will be greatly appreciated.

Thank you for your cooperation.

Henri Jacobs

DTech: Business Administration student



**Instructions:**    *Please mark your answer with an 'X'*  
                              *Write your answer on the space provided*  
                              *Please be frank with you answers*

<b>SECTION A: Work Integrated Learning (WIL) Rationale</b>
--

1.      **Please name the programme you are currently involved in(e.g. *National Diploma Marketing*):**  
.....
2.      **How many years have you been involved with the WIL experience? .....years**
3.      **What do you think are the main reasons for including WIL as part of a qualification?**  
.....  
.....  
.....
4.      **What do you think students have learned from WIL?**  
.....  
.....  
.....
5.      **What do you value most about WIL?**  
.....  
.....  
.....
6.      **Describe the effect that WIL has had in students' understanding of the course content.**  
.....  
.....  
.....
7.      **What can you observe about students that are different than before their WIL experience?**  
.....  
.....  
.....

**8. What advice would you give to students regarding WIL?**

.....

.....

.....

**SECTION B: Skills and Qualities of Students**

**9.1 Firstly, in the table below please list the top 5 skills and qualities that you think that students should have when graduating from university to be appointed as an employee with an employer within your field of study.**

**9.2 Secondly, also indicate your level of satisfaction with the actual skills and qualities that students have attained.**

9.1 Skills and qualities	9.2 Level of satisfaction with the actual skills and qualities attained				
	Poor	Below average	Average	Good	Excellent
<i>E.g. Nice smile</i>			x		
<b>1.</b>					
<b>2.</b>					
<b>3.</b>					
<b>4.</b>					
<b>5.</b>					

**10. Which one of the skills/qualities that you have selected above do you regard to be the most important?**

.....

**10.1 Please elaborate why this quality is the most important:**

.....

.....

.....

## SECTION C: Structure of the Curriculum

11. Regarding the employability of students, should the skills and qualities identified to better prepare students be included as part of their curriculum?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	Don't know

- 11.1 If YES, please indicate how it should be included in the curriculum:

<input type="checkbox"/>	Module
<input type="checkbox"/>	Simulation
<input type="checkbox"/>	Project
<input type="checkbox"/>	Case Study
<input type="checkbox"/>	Other, please specify: .....

12. Please indicate any other suggestions you would like to make in terms of the curriculum that will enhance students' employability:

.....

.....

.....

## SECTION D: Structure of the WIL Component

13. Please specify the qualification name you are involved in (e.g. Education: BEd or PGCE; Clinical Technology: Perfusion, Cardiology, etc.):

.....

*The following questions/statements relate to the structure of the WIL component in the qualification that you are responsible for.*

To get the most out of WIL, please indicate your preferences regarding the following:

<b>14. How many times should students be placed for WIL over the length of the qualification?</b>								
Once			Twice			Three times		
<b>15. When should students be placed for WIL?</b> <i>(May select more than one)</i>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
<b>16. Timing of placement during the relevant year(s) that students are placed</b> <i>(May select more than one)</i>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year
<b>17. How long should the period of WIL be during the relevant year(s) that students are placed?</b> <i>(May select more than one)</i>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
3 months	6 months	1 year	3 months	6 months	1 year	3 months	6 months	1 year
<b>18. Any other suggestions you wish to make:</b>								

## SECTION E: Work Integrated Learning Quality Cycle

*The WIL quality cycle contains the following elements: preparation of students; preparation of employers; placement process; monitoring by the university; mentoring and supervision by employers; assessment by the university and employers; debriefing.*

### **(A) Preparation of students**

- 19.** What should the CUT focus on regarding the preparation of students on campus before they are placed for WIL? **Please indicate the level of importance from the list below as either essential, useful or not necessary.** (Space is also provided to add to the list should you have more suggestions.)

Topic	Essential	Useful	Not necessary
<b>19.1</b> Expectations from the workplace			
<b>19.2</b> Work ethics			
<b>19.3</b> Professional behaviour			
<b>19.4</b> Time management			
<b>19.5</b> CV writing			
<b>19.6</b> Interview skills			
<b>19.7</b> Relationships			
<b>19.8</b> Confidentiality			
<b>19.9</b> Responsibility			
<b>19.10</b> Punctuality			
<b>19.11</b> Attitude			
<b>19.12</b> Team work			
<b>19.13</b> Communication (written)			
<b>19.14</b> Communication (verbal)			
<b>19.15</b> Appearance (dress code)			
<b>19.17</b> Other, specify:			

20. Which one of the topics in the table above do you regard to be the most important?

.....

20.1 Please elaborate why this topic is the most important:

.....  
.....

21. What can be done additionally with the preparation of students that will enhance their employability?

.....  
.....  
.....

21.1 How should your suggestion(s) in question (21) be implemented?

.....  
.....  
.....

**(B) Preparation of employers**

*Employers also need to be prepared and/or approved by CUT for the placement of students for WIL.*

22. What is the single most important thing that the CUT should do with employers in this regard?

.....  
.....

22.1 Please explain why:

.....  
.....  
.....

- 23. What can be done additionally with the preparation of employers that will enhance students' employability?**

.....

.....

.....

**23.1 How should your suggestion(s) in question (23) be implemented?**

.....

.....

.....

**(C) Placement process**

*The placement of students with participating employers can be done in various ways.*

- 24. Please indicate your choice from the list below as preferred, useful or not necessary. (Space is also provided to add to the list should you have more suggestions.)**

Methods	Preferred	Useful	Not necessary
<b>24.1</b> CV, cover letter and interview together with a recommendation from CUT			
<b>24.2</b> CV, cover letter and interview			
<b>24.3</b> CV and interview			
<b>24.4</b> CV, cover letter and recommendation from CUT			
<b>24.5</b> CV and recommendation from CUT			
<b>24.6</b> Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer			
<b>24.7</b> Students to approach employers on their own with a follow-up done by CUT			
<b>24.8</b> Placements to be handled by one representative from CUT			
<b>24.10</b> Other, specify:			

25. What can be done additionally with the placement of students that will enhance their employability?

.....

.....

.....

.....

25.1 How should your suggestion(s) in question (25) be implemented?

.....

.....

.....

.....

***(H) Monitoring of students placed by CUT***

*Students placed with employers need to be monitored by CUT to determine the progress made by students in terms of the training required as well as to determine employers' satisfaction and to elicit comment on the students' progress.*

26. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required. (Space is also provided to add to the list should you have more suggestions.)

Methods	Importance			Frequency of contact			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
26.1 Personal visit by a representative from CUT							
26.2 Communication via telephone							
26.3 Communication via e-mail							
26.4 Communication via fax or letter							
26.5 Other, specify:							



27. Which one of the methods above do you regard to be the most important?

.....

27.1 Please elaborate on your choice: .....

.....

28. What can be done additionally with the monitoring of students that will enhance their employability?

.....

.....

.....

.....

28.1 How should your suggestion(s) in question (28) be implemented?

.....

.....

.....

.....

**(I) Mentoring and supervision by employers**

*Mentoring is generally understood to be the passing on of wisdom and knowledge by amature and experienced person to a younger and less experienced individual. Words typically associated with mentoring include lead, guide, coach, advise, teach and counsel. Supervision by contrast refers to the overseeing of the performance of another. Ideally, a student will have both a mentor and supervisor(s), although both roles could be fulfilled by one person.*

Since the aim of this study is to optimize the contribution that WIL makes towards enhancing the employability of students, kindly indicate the following:

29. How should the mentorship and supervision of students placed for WIL be done?

<input type="checkbox"/>	Separate mentor and supervisor(s)
<input type="checkbox"/>	Combine mentor and supervisor(s)
<input type="checkbox"/>	Other, please specify: .....

**29.1 Please explain the reason(s) for your choice in question (29):**

.....

.....

.....

**30. How can the functions of mentorship and supervision be enhanced?**

Activity	Indicate	
	Yes	No
<b>30.1</b> Provide guidelines with regards to mentorship and supervision to employers		
<b>30.2</b> Provide templates to be used for mentoring and supervision to employers		
<b>30.3</b> Other, specify:		

**30.4 Please explain the reason(s) for your choice(s):**

.....

.....

.....

.....

**31. What can be done additionally with the mentorship and supervision of students placed for WIL that will enhance their employability?**

.....

.....

.....

**31.1 How should your suggestion(s) in question (31) be done?**

.....

.....

.....

**(J) Assessment of WIL by the university and employers**

- 32. How should students be assessed? Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required.** (Space is also provided to add to the list should you have more suggestions.)

Methods	Importance			Frequency of assessment			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>32.1</b> Written assessment							
<b>32.2</b> Oral assessment							
<b>32.3</b> Practical demonstration							
<b>32.4</b> Reflection journal/reports by students							
<b>32.5</b> Assessment in workplace by CUT representative							
<b>32.7</b> Other, specify:							

- 33. Which one of the methods in the table above do you regard to be the most important?**

.....

**33.1 Please explain why this method is the most important:**

.....

- 34. What can be done additionally with the assessment of students placed for WIL that will enhance their employability?**

.....

.....

**34.1 How should your suggestion(s) in question (34) be done?**

.....

.....

**(K) Debriefing**

*During debriefing, students need to reflect on their experiences and provide feedback on their WIL experiences. This enables students, staff and employers to learn from the experiences students had.*

**35. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) debriefing is required. (Space is also provided to add to the list should you have more suggestions to improve this practice.)**

Methods	Importance			Frequency of debriefing			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>35.1</b> Student debrief with employer							
<b>35.2</b> Student debrief with CUT							
<b>35.3</b> CUT debrief with employer							
<b>35.4</b> Presentation							
<b>35.5</b> Written report							
<b>35.6</b> Oral debrief							
<b>35.7</b> Template to assist with the structuring of debriefing							
<b>35.8</b> Other, specify:							

**36. Which one of the methods in the table above do you regard to be the most important?**

.....

**36.1. Please explain why this method is the most important:**

.....

.....

**37. What can be done additionally with the debriefing of students placed for WIL that will enhance their employability?**

.....

.....

.....

**37.1 How should your suggestion(s) in question (37) be done?**

.....

.....

**SECTION F: General**

**38. What are, in your opinion, the reason(s) why employers accommodate students for WIL?**

Please indicate your choice with an (X) in the appropriate box

Reasons	Level of importance for accommodating students for WIL				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
<b>38.1</b> Recruitment method					
<b>38.2</b> Financial benefits					
<b>38.3</b> Social responsibility					
<b>38.4</b> To influence the curriculum					
<b>38.5</b> Participate in the provision of future staff for their relevant industry					
<b>38.6</b> Creating a pool of applicants to use in the future					
<b>38.7</b> Enhancement of productivity					
<b>38.8</b> To ease the workload during peak periods					
<b>38.9</b> To partner with a university					
<b>38.10</b> The services rendered by a university regarding WIL					

**38.11** Other, specify:

**39. Which one of the reasons in the table above do you regard to be the most important?**

.....

**39.1 Please explain why this reason is the most important:**

.....

**40. Do you think employers would prefer to appoint students in their organizations who had completed WIL as opposed to students who did not complete WIL?**

☐

**Yes**

☐

**No**

☐

**Don't know**

**40.1** Please explain the reason(s) for your choice:

.....  
.....

**41. What specifically about WIL enhances the employability of students?**

.....  
.....  
.....

## SECTION G: SWOT Analysis

**42. Kindly provide your assistance in completing a SWOT analysis of WIL at CUT.**

**42.1 The greatest STRENGTH of WIL at CUT is:**

.....  
.....

**42.2 The greatest WEAKNESS of WIL at CUT is:**

.....

.....

**42.3 The greatest OPPORTUNITY for WIL at CUT is:**

.....

.....

**42.4 The greatest THREAT to WIL at CUT is:**

.....

.....

***THANK YOU VERY MUCH FOR YOUR TIME AND ASSISTANCE OFFERED.***

***IT IS GREATLY APPRECIATED.***

## **ANNEXURE 3: STUDENTS' QUESTIONNAIRE**

Dear Student

You have been selected by means of purposive sampling to be a potential respondent in my DTech Business Administration study under supervision of Prof. Albert Strydom. The topic of my study is: A strategy to optimise the contribution of Work Integrated Learning towards the employability of students of the Central University of Technology, Free State.

Literature supports the view that the placement of students for Work Integrated Learning (WIL) with employers enhances the employability of students. This assertion is primarily based on the assumption that the skills that students develop during WIL are the skills required by employers from future employees. Although the same benefits or set of skills developed are reported in literature in some cases, not everyone had reported the same set of skills developed through WIL. It therefore has to be determined which imbalances exist between the skills possessed by students and those required by employers; what are the five most important skills in every industry or occupation; what is the best way(s) to acquire those skills by structuring the preparation of students and employers, monitoring, mentoring, assessment and debriefing of students in such a way that it will optimally enhance the employability of students. The question therefore is: What specifically about WIL will enhance the employability of students and how can this be optimised in a strategy?

It is not required of you to reveal your name or other personal details, which means that your anonymity and confidentiality are assured. Your honest opinion and rating will be greatly appreciated.

Thank you for your cooperation.

Henri Jacobs

DTech: Business Administration student



**Instructions:**    *Please mark your answer with an 'X'*  
                               *Write your answer on the space provided*  
                               *Please be frank with you answers*

### SECTION A: Work Integrated Learning (WIL) Rationale

**1. Please name the programme you are currently enrolled in (e.g. National Diploma Marketing):**

.....

**2. What year of study are you currently in?**

<input type="checkbox"/>	First year
<input type="checkbox"/>	Second year
<input type="checkbox"/>	Third year
<input type="checkbox"/>	Fourth year
<input type="checkbox"/>	Other, please specify:

**3. How many months of WIL experience do you have? .....**

**4. What do you think are the main reasons for including WIL as part of your qualification?**

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 .....  
 .....

**5. What have you learned from WIL?**

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 .....  
 .....

**6. What do you value most about the WIL you have completed?**

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 .....  
 .....

<p><b>7. Describe the effect that WIL has had in understanding the course content of your qualification.</b></p> <p>.....</p> <p>.....</p> <p>.....</p>
<p><b>8. What can you observe about yourself that is different after you have completed WIL?</b></p> <p>.....</p> <p>.....</p> <p>.....</p>
<p><b>9. What advice would you give to other students regarding WIL?</b></p> <p>.....</p> <p>.....</p> <p>.....</p>

<b>SECTION B: Skills and Qualities</b>
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- 10. Firstly, in the table below, please list the top 5 skills and qualities that you think that students should have when graduating from university to be appointed as an employee with an employer within your field of study.**
- 11. Secondly, also indicate your level of satisfaction with the actual skills and qualities that you have attained:**

10. Skills and qualities	11. Level of satisfaction with the actual skills and qualities attained				
	Poor	Below average	Average	Good	Excellent
<i>E.g. Nice smile</i>			<i>x</i>		
<b>1.</b>					
<b>2.</b>					
<b>3.</b>					

4.					
5.					

12. Which one of the skills/qualities that you have listed above do you regard to be the most important?

12.1 Please explain why:.....

.....

13. Regarding the employability of students, should the skills and qualities identified to better prepare students be included as part of their curriculum?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	Don't know

13.1 If YES, please indicate how it should be included in the curriculum:

<input type="checkbox"/>	Module
<input type="checkbox"/>	Simulation
<input type="checkbox"/>	Project
<input type="checkbox"/>	Case Study
<input type="checkbox"/>	Other, please specify: .....

14. Please indicate any other suggestions you would like to make in terms of the curriculum that will enhance students' employability:

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**15. Please specify the qualification name you are involved in** (e.g. Education: BEd or PGCE; Clinical Technology: Perfusion, etc.)

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*The following questions/statements relate to the structure of the WIL component in the qualification that you are studying for.*

**To get the most out of WIL, please indicate your preferences regarding the following:**

<b>16. How many times should students be placed for WIL over the length of the qualification?</b>								
Once			Twice			Three times		
<b>17. When should students be placed for WIL? (May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
<b>18. Timing of placement during the relevant year(s) that students are placed (May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year	Semester 1	Semester 2	Whole year
<b>19. How long should the period of WIL be during the relevant year(s) that students are placed? (May select more than one)</b>								
1 <sup>st</sup> year			2 <sup>nd</sup> year			3 <sup>rd</sup> year		
3 months	6 months	1 year	3 months	6 months	1 year	3 months	6 months	1 year

**20. Any other suggestions you wish to make:**

### SECTION C: Work Integrated Learning Quality Cycle

*The WIL quality cycle contains the following elements: preparation of students; preparation of employers; placement process; monitoring by the university; mentoring and supervision by employers; assessment by the university and employers; debriefing.*

#### **(A) Preparation of students**

**21.** What should the CUT focus on regarding the preparation of students on campus before they are placed for WIL? **Please indicate the level of importance from the list below as either essential, useful or not necessary.** Space is also provided to add to the list should you have more suggestions.

Topic	Essential	Useful	Not necessary
21.1 Expectations from the workplace			
21.2 Work ethics			
21.3 Professional behaviour			
21.4 Time management			
21.5 CV writing			
21.6 Interview skills			
21.7 Relationships			
21.8 Confidentiality			
21.9 Responsibility			
21.10 Punctuality			
21.11 Attitude			
21.12 Team work			
21.13 Communication (written)			

<b>21.14</b> Communication (verbal)			
<b>21.15</b> Appearance (dress code)			
<b>21.16</b> Other, specify:			

**22. Which one of the topics in the table above do you regard to be the most important?**

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**22.1 Please elaborate why this topic is the most important:**

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**23. What can be done additionally with the preparation of students that will enhance their employability and how should it be done?**

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**23.1 How should your suggestion(s) in question (23) be implemented?**

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**(B) Preparation of employers**

*Employers also need to be prepared and/or approved by CUT for the placement of students for WIL.*

**24. What is the single most important thing that the CUT should do with employers in this regard?**

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**24.1 Please explain why:**

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**25. What can be done additionally with the preparation of employers that will enhance students' employability?**

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**25.1 How should your suggestion(s) in question (25) be implemented?**

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**(C) Placement process**

*The placement of students with participating employers can be done in various ways.*

**26. Please indicate your choice from the list below as preferred, useful or not necessary.** (Space is also provided to add to the list should you have more suggestions.)

Methods	Preferred	Useful	Not necessary
<b>26.1</b> CV, cover letter and interview together with a recommendation from CUT			
<b>26.2</b> CV, cover letter and interview			
<b>26.3</b> CV and interview			
<b>26.4</b> CV, cover letter and recommendation from CUT			
<b>26.5</b> CV and recommendation from CUT			
<b>26.6</b> Student(s) allocated by CUT based on CUT's knowledge of the student(s) and employer			
<b>26.7</b> Students to approach employers on their own with a follow-up done by CUT			

<b>26.8</b> Placements to be handled by one representative form CUT			
<b>26.9</b> Other, specify:			

**27. What can be done additionally with the placement of students that will enhance their employability?**

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**27.1 How should your suggestion(s) in question (27) be implemented?**

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**(L) Monitoring of students placed by CUT**

*Students placed with employers need to be monitored by CUT to determine the progress made by students in terms of the training required as well as to determine employers' satisfaction and to elicit comment on the students' progress.*

**28. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required. (Space is also provided to add to the list should you have more suggestions.)**

Methods	Importance			Frequency of contact			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>28.1</b> Personal visit by a representative from CUT							
<b>28.2</b> Communication via telephone							
<b>28.3</b> Communication via e-mail							



28.4 Communication via fax or letter							
28.5 Other, specify:							

29. Which one of the methods above do you regard to be the most important?

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29.1 Please elaborate on your choice: .....

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30. What can be done additionally with the monitoring of students that will enhance their employability?

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30.1 How should your suggestion(s) in question (30) be implemented?

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**(M) Mentoring and supervision by employers**

*Mentoring is generally understood to be the passing on of wisdom and knowledge by a mature and experienced person to a younger and less experienced individual. Words typically associated with mentoring include lead, guide, coach, advise, teach and counsel. Supervision by contrast refers to the overseeing of the performance of another. Ideally, a student will have both a mentor and supervisor(s), although both roles could be fulfilled by one person.*

Since the aim of this study is to optimize the contribution that WIL makes towards enhancing the employability of students, kindly indicate the following:

**31. How should the mentorship and supervision of students placed for WIL be done?**

<input type="checkbox"/>	Separate mentor and supervisor(s)
<input type="checkbox"/>	Combine mentor and supervisor(s)
<input type="checkbox"/>	Other, please specify: .....

**31.1 Please explain the reason(s) for your choice in question (31):**

.....

.....

.....

**32. How can the functions of mentorship and supervision be enhanced?**

Activity	Indicate	
	Yes	No
<b>32.1</b> Provide guidelines with regards to mentorship and supervision to employers		
<b>32.2</b> Provide templates to be used for mentoring and supervision to employers		
<b>32.3</b> Other, specify:		

**32.4 Please explain the reason(s) for your choice(s):**

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**33. What can be done additionally with the mentorship and supervision of students placed for WIL that will enhance their employability?**

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**33.1 How should your suggestion(s) in question (33) be done?**

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**(N) Assessment of WIL by the university and employers**

- 34. How should students be assessed? Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) contact is required. (Space is also provided to add to the list should you have more suggestions.)**

Methods	Importance			Frequency of assessment			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>34.1</b> Written assessment							
<b>34.2</b> Oral assessment							
<b>34.3</b> Practical demonstration							
<b>34.4</b> Reflection journal/reports by students							
<b>34.5</b> Assessment in workplace by CUT representative							
<b>34.6</b> Other, specify:							

- 35. Which one of the methods in the table above do you regard to be the most important?**

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**35.1 Please explain why this method is the most important:**

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- 36. What can be done additionally with the assessment of students placed for WIL that will enhance their employability?**

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### 36.1 How should your suggestion(s) in question (36) be done?

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### (O) Debriefing

*During debriefing students need to reflect on their experiences and provide feedback on their WIL experiences. This enables students, staff and employers to learn from the experiences students had.*

- 37. Please indicate the level of importance from the list below as either essential, useful or not necessary. Kindly also indicate how often (frequently) debriefing is required. (Space is also provided to add to the list should you have more suggestions to improve this practice.)**

Methods	Importance			Frequency of debriefing			
	Essential	Useful	Not necessary	Weekly	Monthly	Quarterly	Once per semester
<b>37.1</b> Student debrief with employer							
<b>37.2</b> Student debrief with CUT							
<b>37.3</b> CUT debrief with employer							
<b>37.4</b> Presentation							
<b>37.5</b> Written report							
<b>37.6</b> Oral debrief							
<b>37.7</b> Template to assist with the structuring of debriefing							
<b>37.8</b> Other, specify:							

- 38. Which one of the methods in the table above do you regard to be the most important?**

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- 38.1. Please explain why this method is the most important:**

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39. What can be done additionally with the debriefing of students placed for WIL that will enhance their employability?

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39.1 How should your suggestion(s) in question (39) be done?

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**SECTION F: General**

40. What are, in your opinion, the reason(s) why employers accommodate students for WIL?

Please indicate your choice with an (X) in the appropriate box

Reasons	Level of importance for accommodating students for WIL				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
40.1 Recruitment method					
40.2 Financial benefits					
40.3 Social responsibility					
40.4 To influence the curriculum					
40.5 Participate in the provision of future staff for their relevant industry					
40.6 Creating a pool of applicants to use in the future					
40.7 Enhancement of productivity					
40.8 To ease the workload during peak					

periods					
<b>40.9</b> To partner with a university					
<b>40.10</b> The services rendered by a university regarding WIL					
<b>40.11</b> Other, specify:					

**41. Which one of the reasons in the table above do you regard to be the most important?**

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**41.1 Please explain why this reason is the most important:**

.....

.....

**42. Do you think employers would prefer to appoint students in their organizations who had completed WIL as opposed to students who did not complete WIL?**

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

**Yes**

**No**

**Don't know**

**42.1** Please explain the reason(s) for your choice:

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**43. What specifically about WIL enhances the employability of students?**

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## SECTION G: SWOT Analysis

**44. Kindly provide your assistance in completing a SWOT analysis of WIL at CUT.**

**44.1 The greatest STRENGTH of WIL at CUT is:**

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**44.2 The greatest WEAKNESS of WIL at CUT is:**

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**44.3 The greatest OPPORTUNITY for WIL at CUT is:**

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**44.4 The greatest THREAT to WIL at CUT is:**

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***THANK YOU VERY MUCH FOR YOUR TIME AND ASSISTANCE OFFERED.***

***IT IS GREATLY APPRECIATED.***